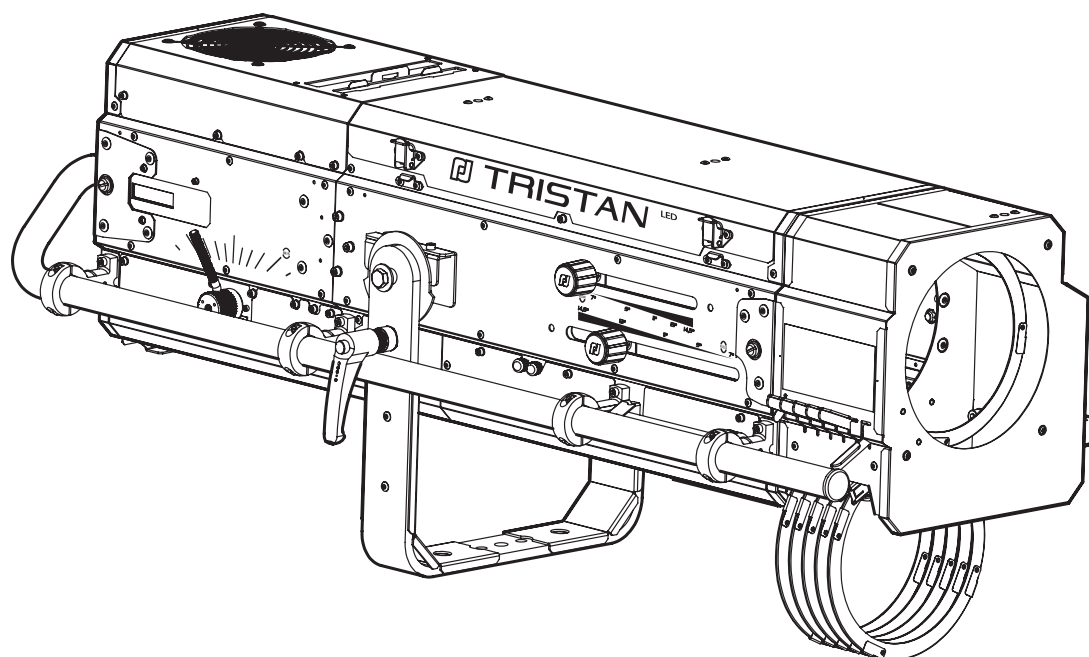


# TRISTAN

## 825W LED FOLLOWSPOT

Manual



| Angles    | Standard / CE | North American |
|-----------|---------------|----------------|
| 7 - 14,5° | 1189          | 1189C          |

Product  
Updates:



V1

- FIRMWARE: **V4.x**  
- RJ-LED2 FIRMWARE PLATFORM (Node Mode) full manual is  
available for download at [www.robertjuliat.com/LED/PDF\\_PAGE](http://www.robertjuliat.com/LED/PDF_PAGE)

**DN41242100 (EN)**

Released: 30/04/25

Robert Juliât S.A.S. 32, rue de Beaumont, F 60530 Fresnoy-en-Thelle - phone : +33 (0)3 44 26 51 89 - [info@robertjuliât.fr](mailto:info@robertjuliât.fr)

[www.robertjuliât.com](http://www.robertjuliât.com)

  
**ROBERT JULIAT**

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## GENERAL INSTRUCTIONS

1. Not for residential use.
2. These fixtures must only be serviced by a qualified technician.
3. In addition to the instructions indicated on this page, relevant health and safety requirements of the appropriate EU Directives must be adhered to at all times.
4. This fixture is in compliance with section 17 - Lighting appliance for theatre stages, television, cinema and photograph studios.  
Standards NF EN 60598-1, NF EN 60598-2-17, Low Voltage Directive 2014/35/UE & EMC Directive 2014/30/UE.
5. This fixture is rated as IP20, and is for indoor use only.

## FIXTURE

6. Ensure fixture is correctly mounted on an appropriate support.
7. Protection screens and lenses must be replaced in the event of any damage, such as cracks or deep scratches, since these might reduce performance.
8. When hung or flown the fixture must be secured by an additional hanging accessory (such as a safety cable or bond) of suitable length.
9. Safety bonds or cables must be securely attached to the back of the fixture and be as short as possible, or rolled up as necessary, to minimise travel distance should the fixture be dislodged.
10. Movable accessories (scroller, etc.) must also be secured with a suitable safety cable or bond at the front of the fixture.
11. The combined weight of both the fixture and the accessories must be considered when choosing the load-bearing capability of safety cable or bond.
12. Do not open lighting fixture when the source is on.
13. WARNING: LED source become hot during use. Allow fixture to cool before servicing.
14. Do not tamper with design of fixture nor any of its safety features.
15. Tighten electrical mains cable connections regularly and replace with one of identical specification if damaged.
16. Use only with correct power supply.

## VENTILATION

17. Keep well away from flammable material.
18. Not for outdoor use. Do not cover. Do not permit fixture to get wet.
19. To avoid overheating, do not obstruct air vents.
20. Ensure any cooling fans are in correct working order. If fans are not working, turn fixture off immediately and service as necessary.

## CLEANING

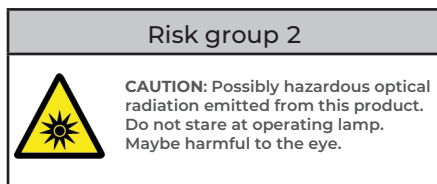
21. Do not touch the LED source with your fingers.
22. To clean the optical parts, use a soft cloth in combination with distilled water or isopropyl alcohol recommended for coated optics. Do not use any cleaning product that contains solvents or abrasives, as these can cause surface damage. Dry with a soft lint-free cloth.
23. Regularly remove dust with a soft lint-free cloth.
24. If the fixture has filters, they must be cleaned frequently.

## POWER SUPPLY

25. Disconnect from the mains before servicing.
26. Mains connection only. Do not connect to "electronic output" such as dimmer.
27. Ensure power supply circuit breakers, always remain accessible.

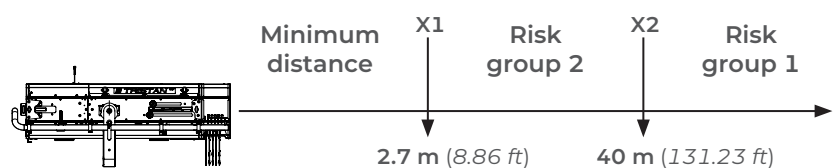
## PLEASE NOTE

This product has been built to conform to European standards relating to professional lighting equipment. Any modification made to our products will void the manufacturers' warranty.

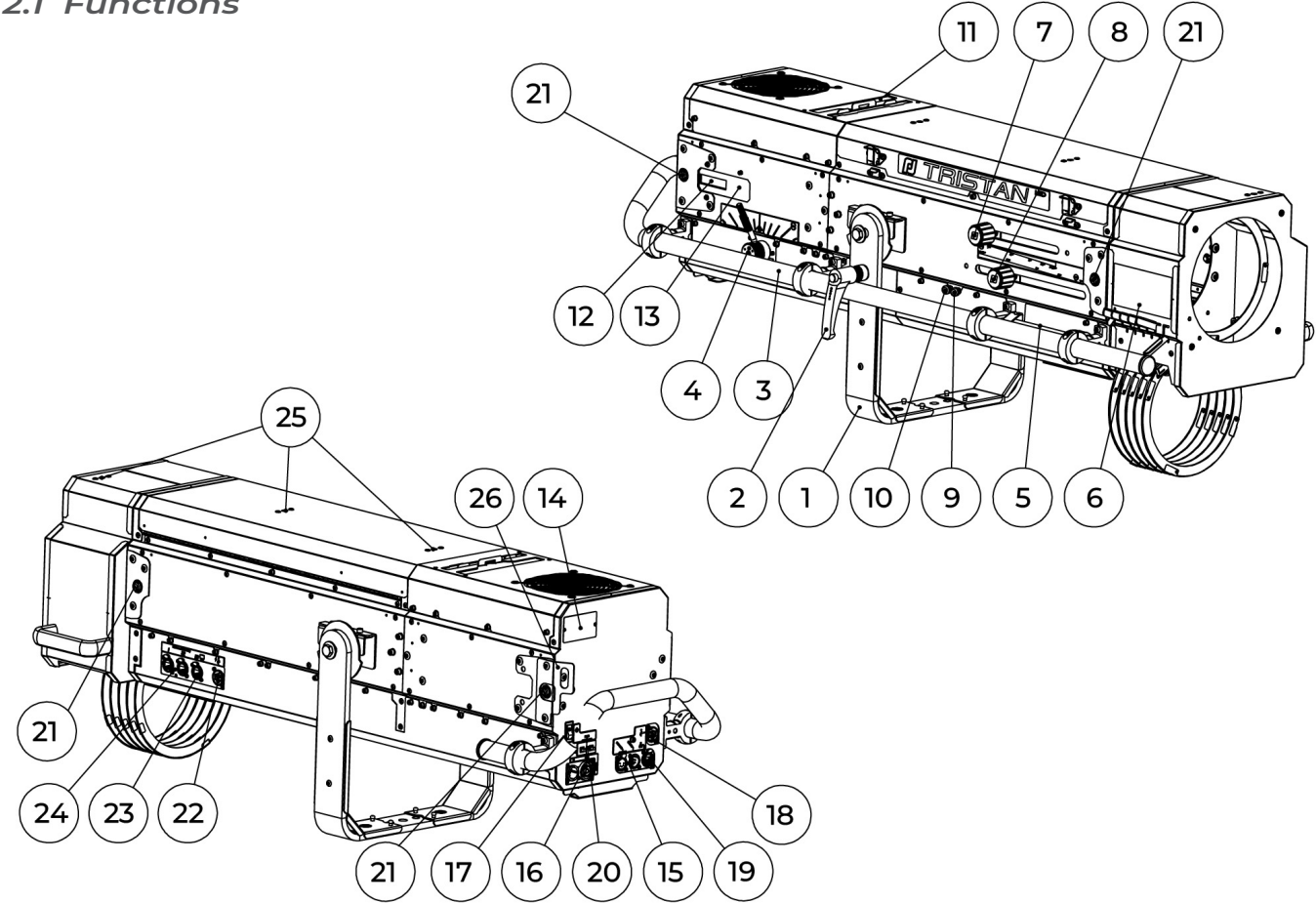


Risk group 2. Luminaires should be positioned so that prolonged staring into luminaire at a distance closer than 2.7 m is not expected.

## Photobiological safety according to EN62471

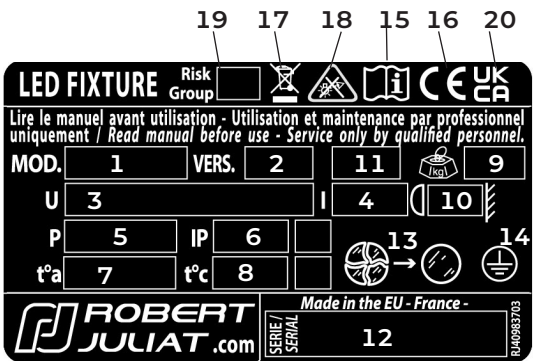


2.1 Functions



| Description              |                                   |
|--------------------------|-----------------------------------|
| 1. Yoke                  | 15. Data connectors (IN and OUT)  |
| 2. Tilt locking handle   | 16. Power connectors (IN and OUT) |
| 3. Side operating handle | 17. Power switch                  |
| 4. Iris control          | 18. USB connector (5W)            |
| 5. Dimming control       | 19. RJ45 connector                |
| 6. Colour changer        | 20. Fuses                         |
| 7. Zoom adjustment       | 21. Lifting ring insert (M8)      |
| 8. Focus adjustment      | 22. USB connector (10W)           |
| 9. Frost glass           | 23. Remote display connector      |
| 10. Spare filter         | 24. Accessory connectors (x2)     |
| 11. Gobo slot            | 25. 1/4" Accessory mounting       |
| 12. Local display        | 26. Safety cable attachment point |
| 13. Keypad               |                                   |
| 14. Identification plate |                                   |

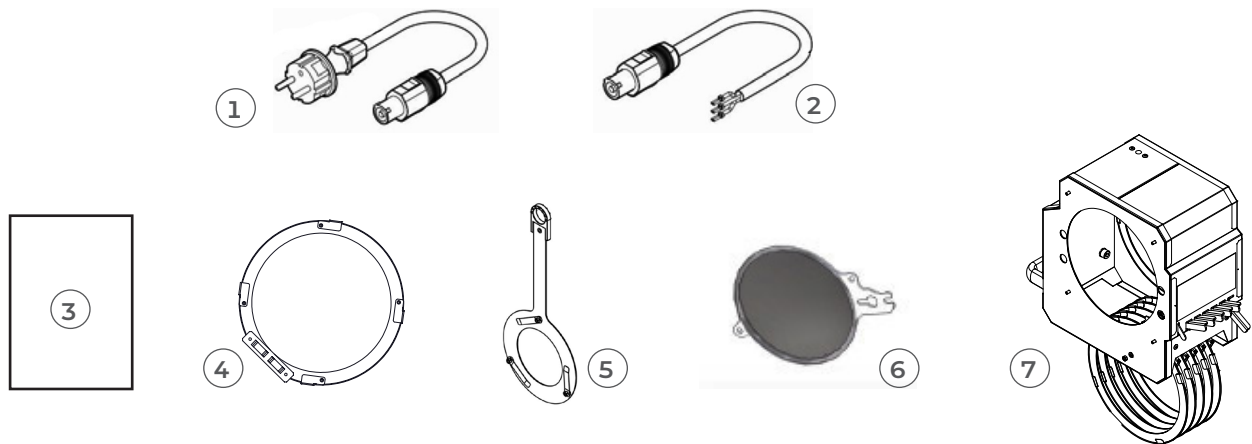
## 2.2 Identification label

| Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><b>LED FIXTURE</b> Risk Group      </p> <p>Lire le manuel avant utilisation - Utilisation et maintenance par professionnel uniquement / Read manual before use - Service only by qualified personnel.</p> <p>MOD. <b>1</b> VERS. <b>2</b> <b>11</b>  <b>9</b></p> <p>U <b>3</b> I <b>4</b>  <b>10</b></p> <p>P <b>5</b> IP <b>6</b></p> <p>t<sup>a</sup> <b>7</b> t<sup>c</sup> <b>8</b>  <b>13</b>  <b>14</b></p> <p><b>ROBERT JULIAT</b> .com <i>Made in the EU - France -</i>  <b>12</b> </p> | <ol style="list-style-type: none"> <li>MOD. : Model</li> <li>VERS. : Version</li> <li>U : Nominal voltage input (V)</li> <li>I : Nominal intensity (A)</li> <li>P : Maximum power input (W)</li> <li>IP : International Protection Rating</li> <li>t<sup>a</sup> : Maximum ambient temperature (°C)</li> <li>t<sup>c</sup> : Maximum external temperature of the unit (°C)</li> <li>Net weight (kg)</li> <li>Minimum distance between a flammable material and the lighting unit (m)</li> <li>Colour temperature version</li> <li>Serial number</li> <li>Replace broken glass</li> <li>Class 1 product label</li> <li>Read manual first label</li> <li>European conformity label</li> <li>WEEE directive label</li> <li>CEI-TR-62778 - Do not stare at light source</li> <li>EN62471 - Risk group</li> <li>UKCA (UK Conformity Assessed) label</li> </ol> |

**Units:**

- Weight = kilogram (kg).
- Intensity = Ampere (A).
- Voltage = Volt (V).
- Frequency = Hertz (Hz).
- Temperature = degree Celsius (°C).

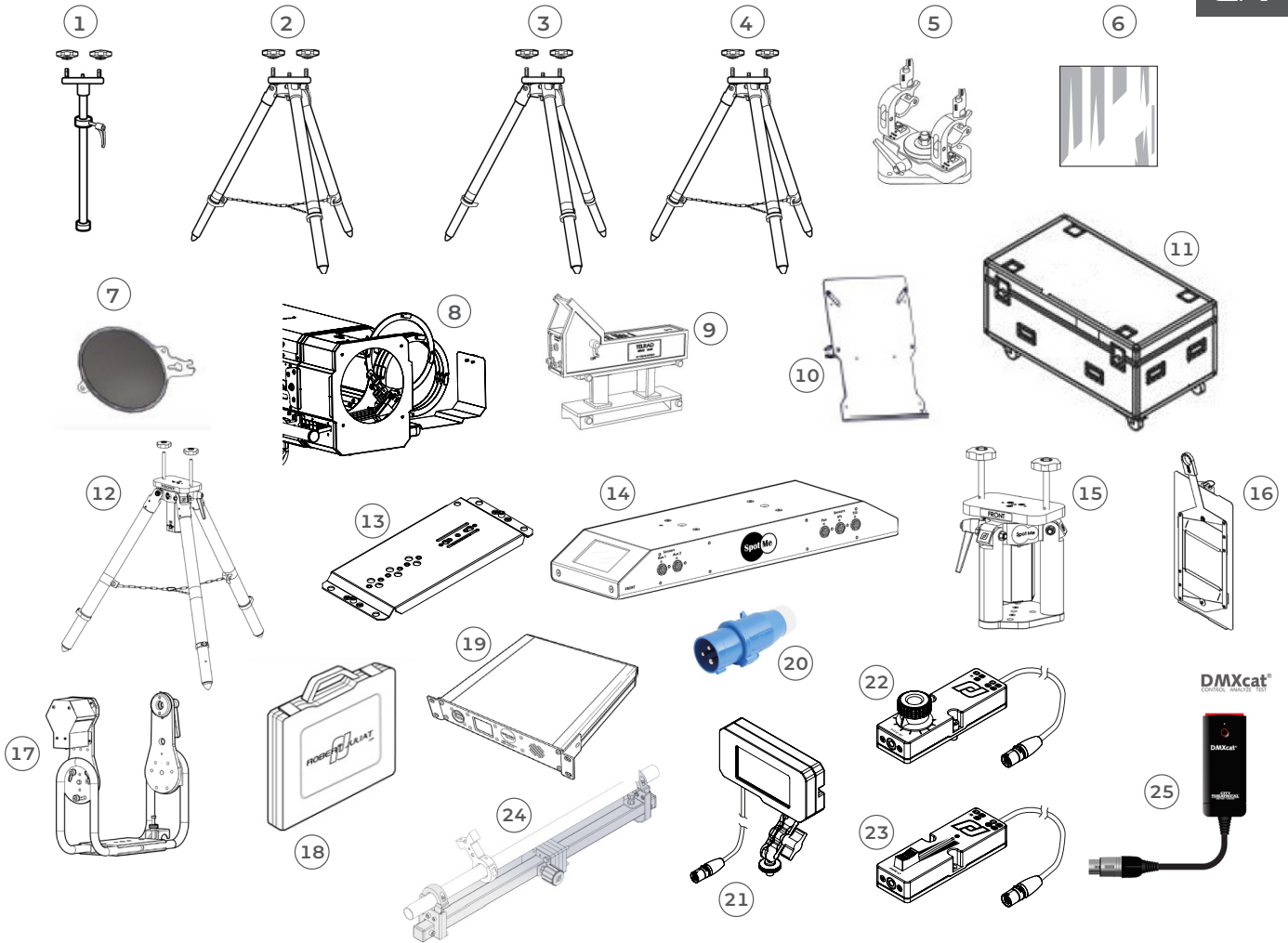
## 2.3 Accessories included



|   | Reference  | Description                                                                                                                     |
|---|------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1 | CAL03      | 3 meter power cable ( 3G1,5 HO7RNF) with Neutrik PowerCon® True1 TOP and CEE 7/7 (2P+T NF/SCHUKO) connectors (standard version) |
| 2 | CAL04      | 1,50m power cable UL/CSA with Neutrik® powerCON TRUE1 TOP connector (North American version)                                    |
| 3 | DN41242200 | Quick Start manual                                                                                                              |
| 4 | PF1011     | Ø210 mm metal filter holder (x6)                                                                                                |
| 5 | SGUP2      | Universal "A" size gobo-holder (metal & glass)                                                                                  |
| 6 | VDM100     | Ø100 mm frosted glass with holder                                                                                               |
| 7 | M270/2B    | 6-way "boomerang" colour changer                                                                                                |

## 2.4 Accessories

EN



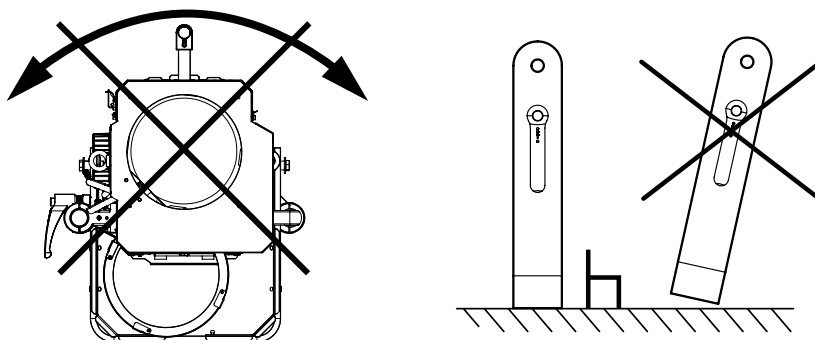
|    | Reference  | Description                                                                                    |
|----|------------|------------------------------------------------------------------------------------------------|
| 1  | JPP        | Monopod stand for overhead followspot                                                          |
| 2  | GT4000     | Tripod stand with safety chain - SWL: 130 Kg - max. height: 1030 mm                            |
| 3  | GT4000S    | Tripod stand without safety chain - SWL: 130 Kg - max. height: 1030 mm                         |
| 4  | GT4000R    | Tripod stand with ball head rotation with security chain - SWL: 130 Kg - max. height: 1030 mm  |
| 5  | T4000      | Followspot mount for Ø50 mm pipe (suspension or overhead) - SWL= 100 Kg                        |
| 6  | VD120      | 120 x 120 mm frosted glass                                                                     |
| 7  | FCM100R    | Ø120 mm 1/2 CTO correction filter (Rosco #3408) with holder                                    |
| 8  | M270/2TM   | 6-way "Push/Pull" colour changer                                                               |
| 9  | KIT TELRAD | Telrad followspot sight with raiser and universal mounting kit                                 |
| 10 | SDUP       | Followspot cue sheet holder with universal mounting kit                                        |
| 11 | FC1189/S   | Flight-case for LLT range / GT stand / accessories                                             |
| 12 | GT4000RSM  | Tripod stand with safety chain - SWL: 130 Kg - max. height: 1030 mm (equipped with PAN sensor) |
| 13 | PSA1       | Support plate for 2x P1FE and 1/4" accessories                                                 |
| 14 | SMS        | SpotMe server + 2 sensor cables + flight case                                                  |
| 15 | T4000RSM   | Followspot mount with ball head rotation and SpotMe PAN sensor SWL = 100 Kg - Weight: 8,83 Kg  |
| 16 |            | Horizontal chopper                                                                             |
| 17 | FRO/SMCPD  | Heavy duty adjustable yoke equipped with TILT SpotMe sensor (C type)                           |
| 18 | TCSM       | SpotMe calibration tool kit                                                                    |
| 19 | MAESTRO    | Maestro server for SpotMe - rackable unit: 1U - half 19"                                       |
| 20 | PCP1716A   | 16A blue 2P+E 6h IEC60309 power connector (option)                                             |
| 21 | R-DISPE1   | Remote display - Ethernet connector                                                            |
| 22 | P1FE-R1    | One-function remote controller (with rotary potentiometer) - Ethernet connector                |
| 23 | P1FE-L1    | One-function remote controller (with linear potentiometer) - Ethernet connector                |
| 24 | BK1        | Followspot balancing kit (including 1 Kg counterweights) - Weight: 2.05 Kg                     |
| 25 | DMXcat     | Bluetooth DMX/RDM Multifunction test tool - City Theatrical DMXcat®                            |

## 3 Set-up

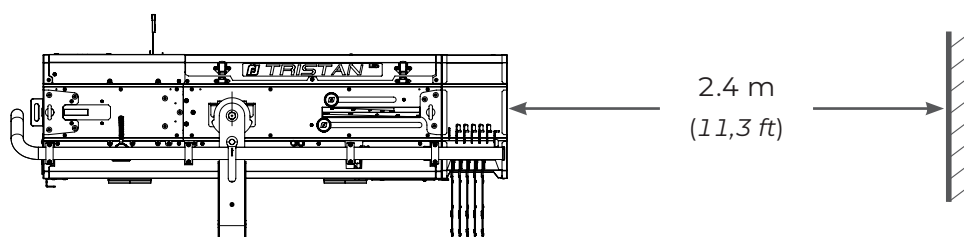
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### 3.1 Mechanics

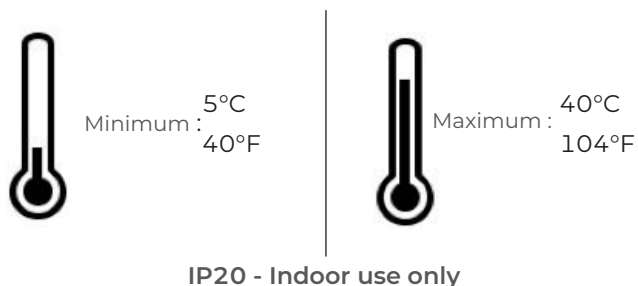
#### 3.1.1 Operating positions



#### 3.1.2 Minimum distance between a flammable material and the lighting unit



#### 3.1.3 Instructions for use



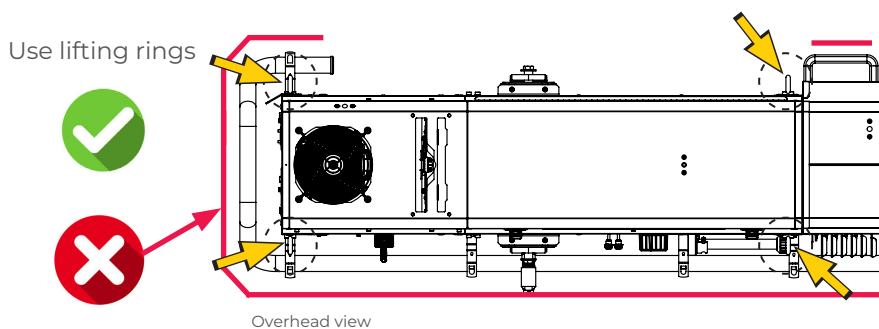
#### 3.1.4 Lifting



• Net weight:  
39 Kg (116.6 lbs)



Lifting ring DIN 580 M8  
(x4 Not supplied)

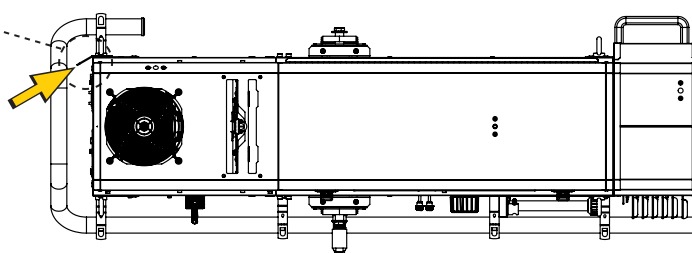


#### 3.1.5 Safety cable

• Safety cable attachment point



Safety cable not supplied.

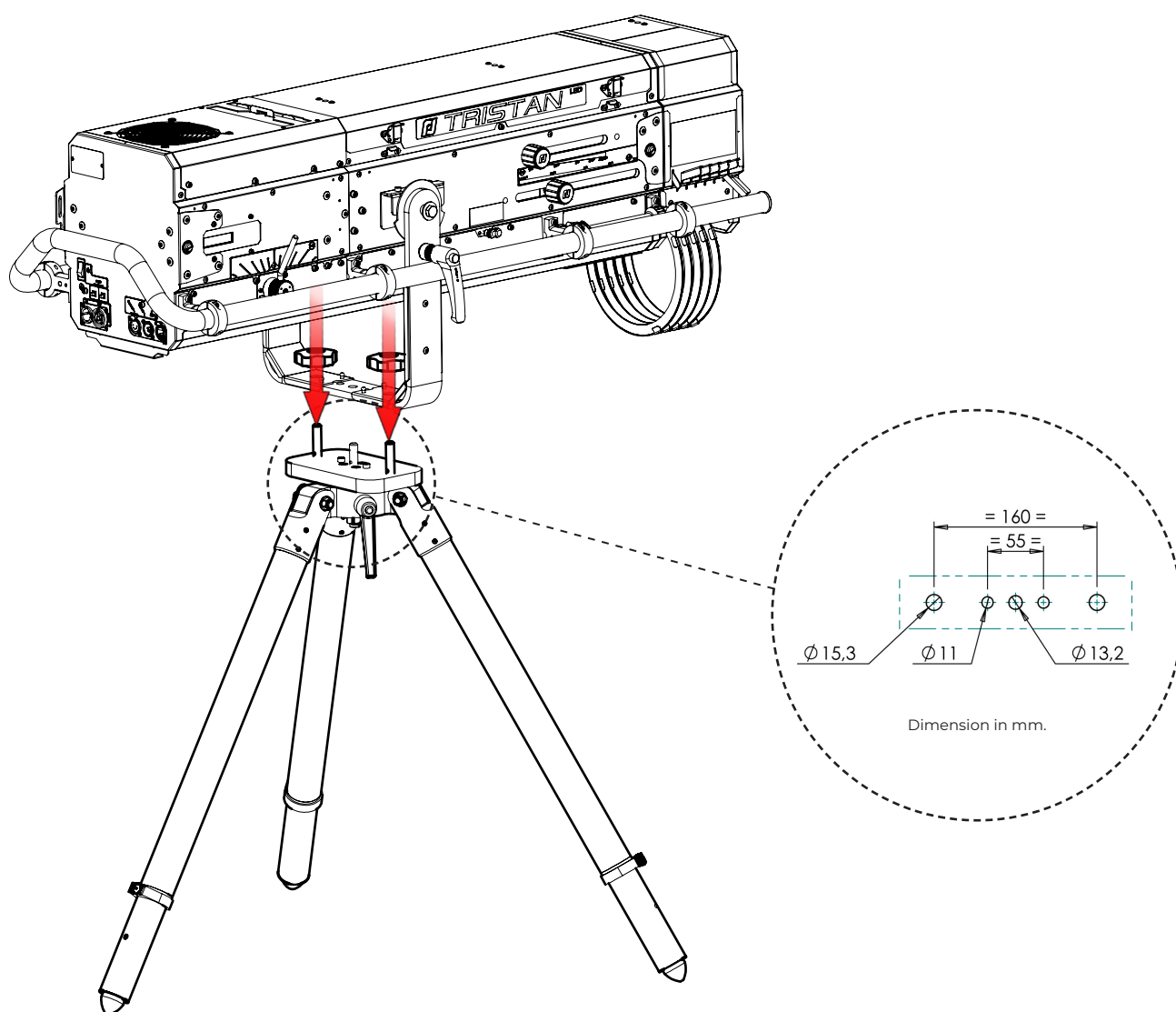


**The unit must be installed only on a Robert Juliat compatible stand / head :**

|           |                                                                                                                   |
|-----------|-------------------------------------------------------------------------------------------------------------------|
| JPP       | Monopod stand for overhead followspot                                                                             |
| GT4000    | Tripod stand with safety chain - SWL: 130 Kg - max. height: 1030 mm                                               |
| GT4000S   | Tripod stand without safety chain - SWL: 130 Kg - max. height: 1030 mm                                            |
| GT4000R   | Tripod stand with ball head rotation with security chain - SWL: 130 Kg - max. height: 1030 mm                     |
| T4000     | Followspot mount for Ø50mm pipe (suspension or overhead) - SWL= 100 Kg                                            |
| GT4000RSM | Tripod stand with ball head rotation with safety chain and SpotMe PAN sensor - SWL: 130 Kg - max. height: 1030 mm |
| T4000RSM  | Followspot mount with ball head rotation and SpotMe PAN sensor - SWL= 100 Kg                                      |

• GT4000 / GT4000S / GT4000R

*Please refer to the relevant stand technical files for further details.*

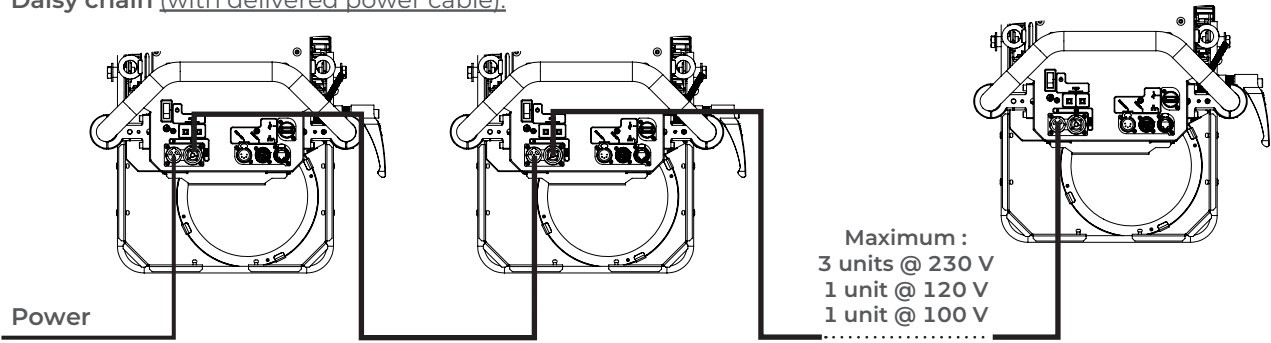


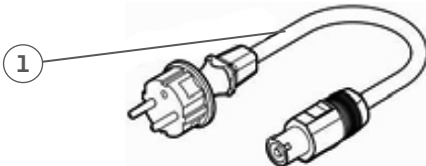
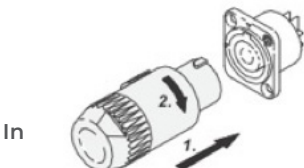
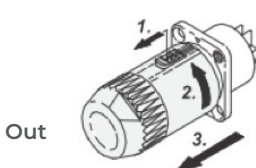
3.2.1 LED source

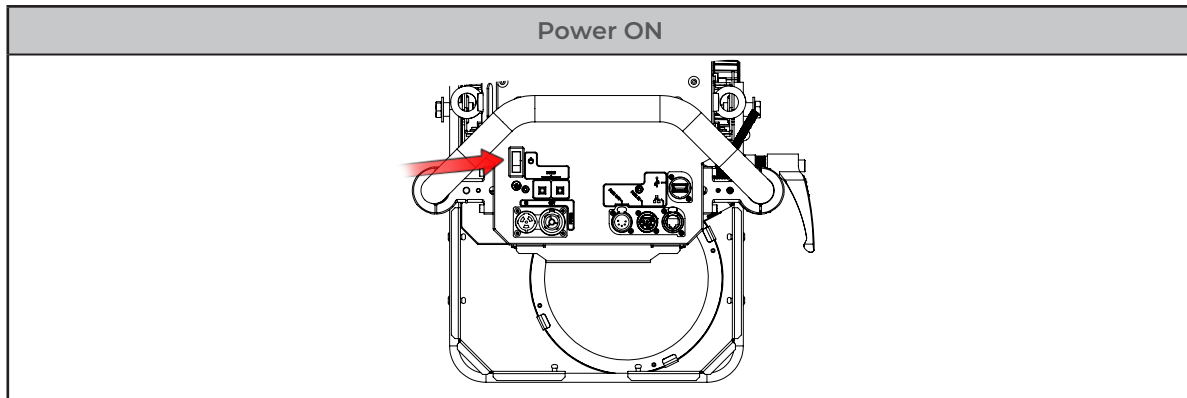


Never touch or scratch the LED surface.  
See 6.1.4 LED source.

3.2.2 Power supply

| Power supply                                                                                                                                                                                                                                                                                                                                |           |                                                                                                               |                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Voltage                                                                                                                                                                                                                                                                                                                                     | Frequency | Input power                                                                                                   | Connectors                                                |
| 90 → 277 V                                                                                                                                                                                                                                                                                                                                  | 47-63 Hz  | 4,39 A / 958 W @ 230 V<br>9,27 A / 990 W @ 120 V<br>10,31 A / 1000 W @ 100 V<br>Max. = 12 A<br>Standby < 11 W | Neutrik powerCON TRUE1 TOP<br>Input :<br>ref. NAC3FPX-TOP |
| <div><ul style="list-style-type: none"><li>• Class 1 product. <b>This luminaire must be earthed.</b></li><li>• Must be connected directly to AC power. <b>Do not connect to dimmer power.</b></li><li>• Automatic mains voltage detection.</li></ul></div> |           |                                                                                                               |                                                           |
| <p>Daisy chain (with delivered power cable):</p> <div><p>Maximum :<br/>3 units @ 230 V<br/>1 unit @ 120 V<br/>1 unit @ 100 V<br/>.....</p></div>                                                                                                         |           |                                                                                                               |                                                           |

| Power cable                                                                                                                                                                                              |                        |                                          |            |                        |              |                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------------------------|------------|------------------------|--------------|------------------------------------------------------|
| <div><div></div><div></div></div> |                        |                                          |            |                        |              |                                                      |
| Power cable                                                                                                                                                                                              |                        | Connector                                | Mains plug | Cable type             | Cable length | Wiring                                               |
| 1                                                                                                                                                                                                        | Standard version       | Neutrik® powerCON TRUE1 TOP NAC3FX-W-TOP | CEE7/7     | 3G1.5 H07RNF           | 3 m 9.8 ft   | Live: Brown<br>Neutral: Blue<br>Ground: Yellow/Green |
| 2                                                                                                                                                                                                        | North American version |                                          | -          | 14AWG SJ TYPE (UL/CSA) | 1.5 m 4.9 ft | Live: Black<br>Neutral: White<br>Ground: Green       |
| <div><div></div><div></div></div> |                        |                                          |            |                        |              |                                                      |



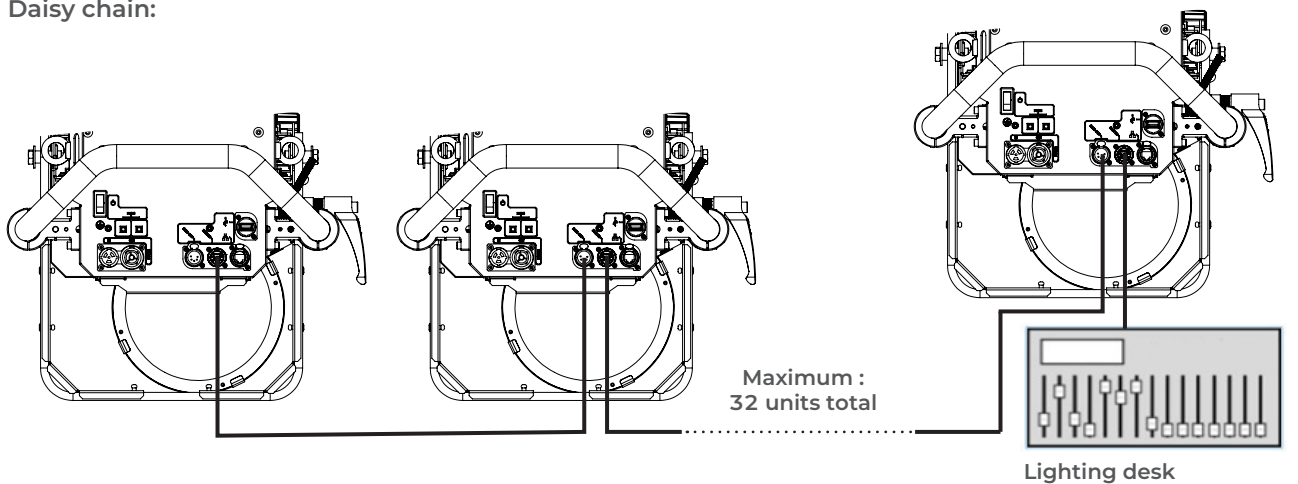
### 3.3 DATA

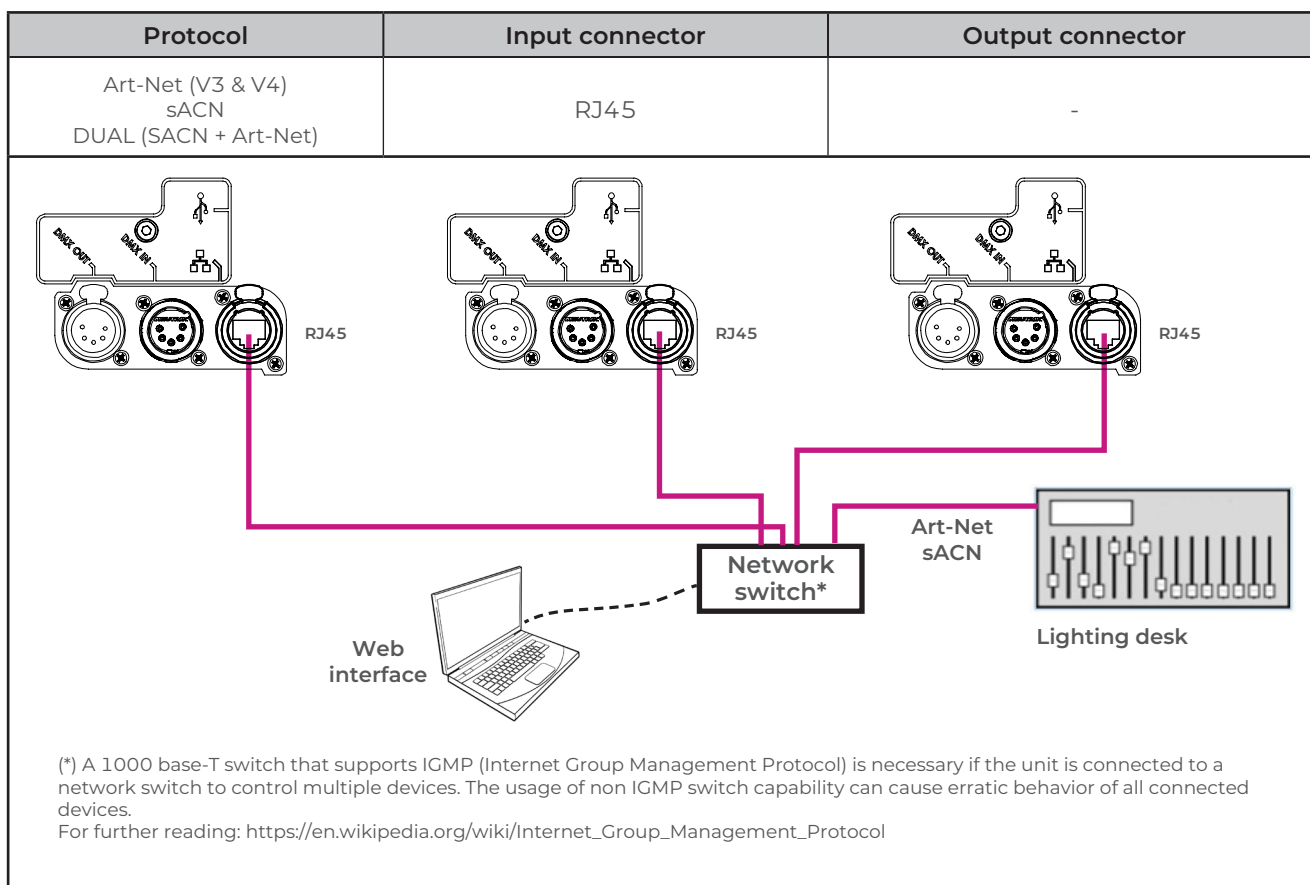
#### 3.3.1 DMX 512-A / RDM

| Protocol               | Input connector | Output connector |
|------------------------|-----------------|------------------|
| USITT DMX 512-A<br>RDM | XLR 5-pin       | XLR 5-pin        |

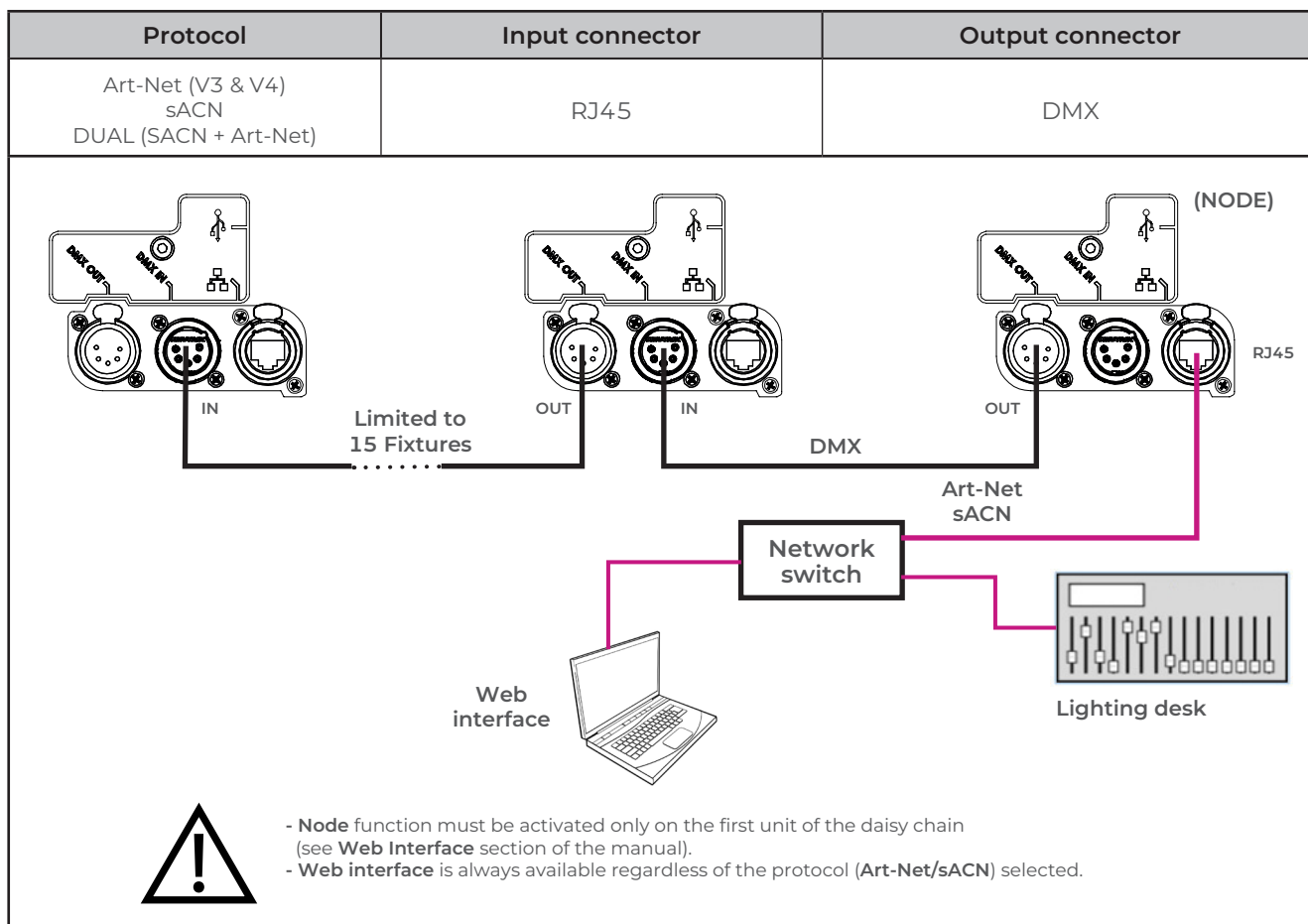
| DATA connectors |           |                                   |  |
|-----------------|-----------|-----------------------------------|--|
| PIN #           | DMX       | Description                       |  |
| 1               | Shielding | Foil & Braided Shield             |  |
| 2               | DMX (-)   | 1st conductor of 1st twisted pair |  |
| 3               | DMX (+)   | 2nd conductor of 1st twisted pair |  |
| 4               | Not used  | 1st conductor of 2nd twisted pair |  |
| 5               | Not used  | 2nd conductor of 2nd twisted pair |  |

**Daisy chain:**



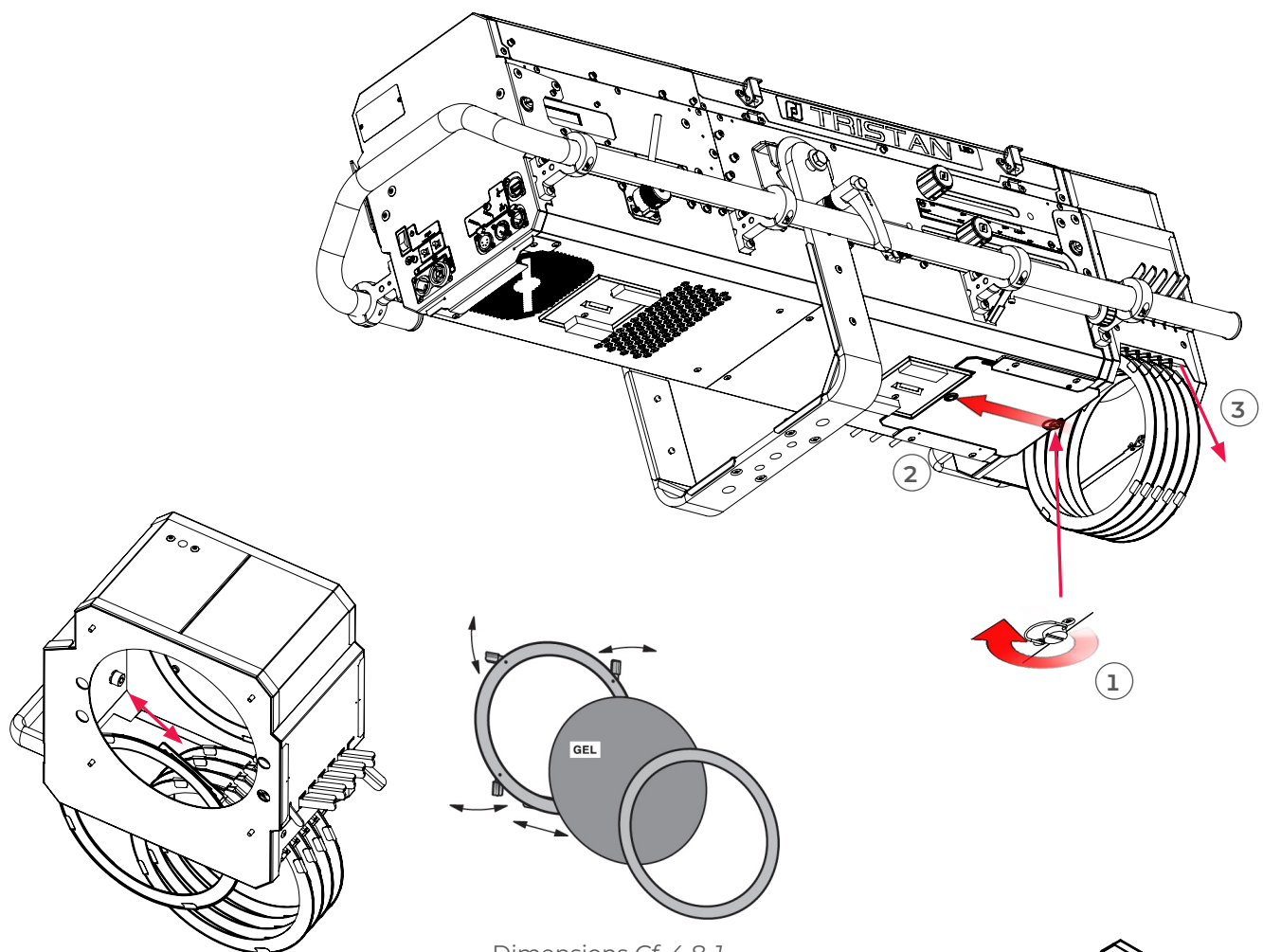


## 3.3.3 Ethernet / DMX node

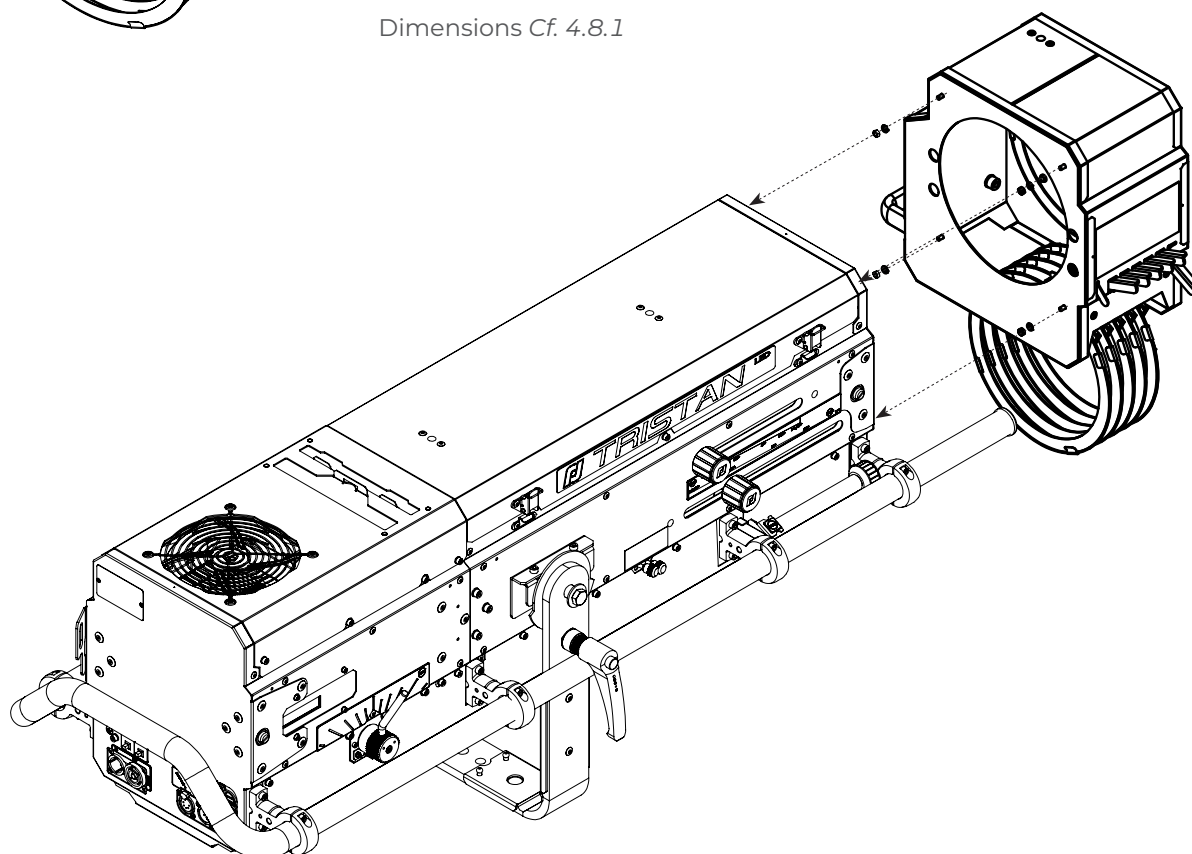


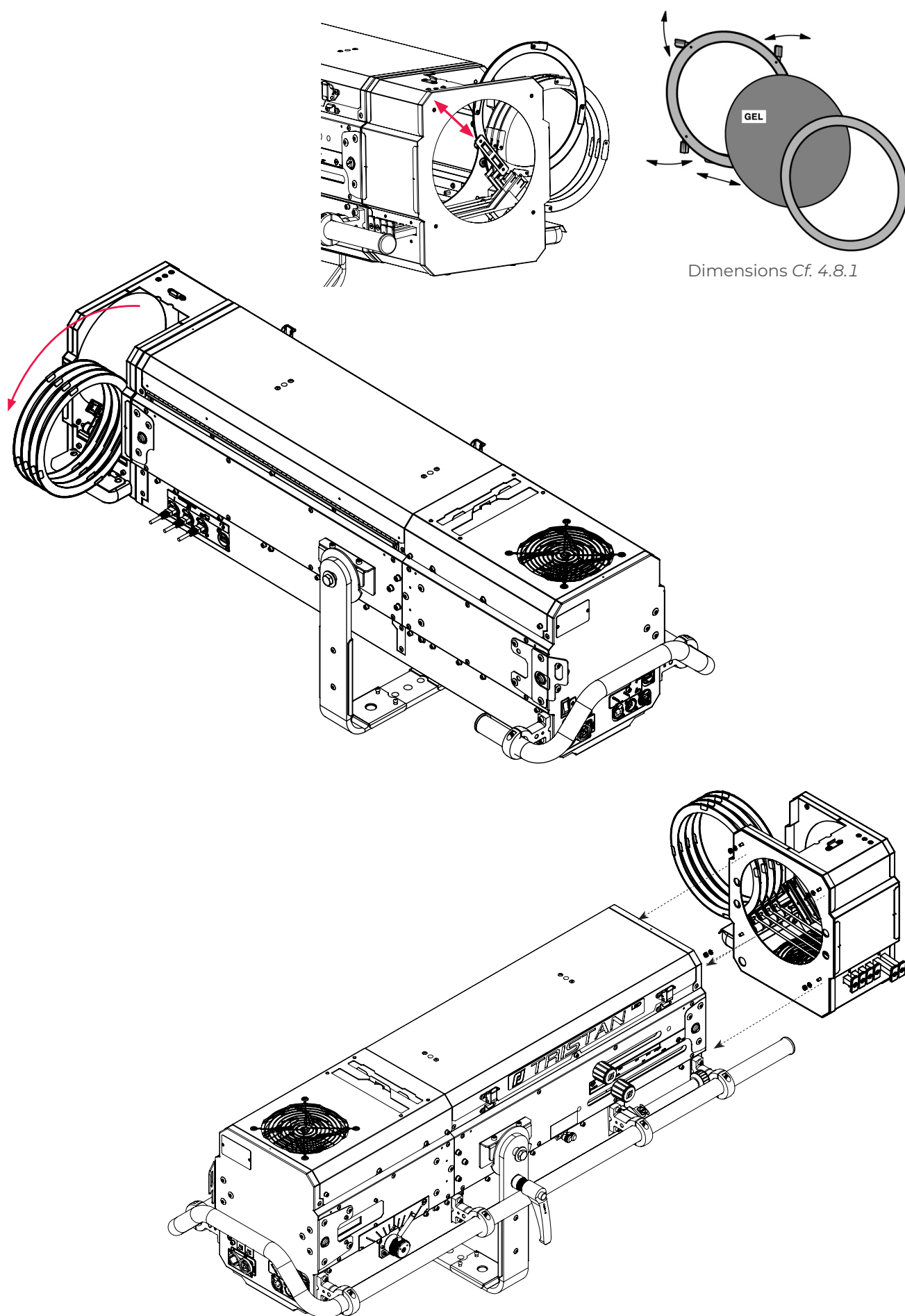
RJ-LED2 FIRMWARE PLATFORM (Node Mode) full manual is available for download at [www.robertjuliat.com/LED/PDF\\_PAGE](http://www.robertjuliat.com/LED/PDF_PAGE)

### 3.4.1 Colour changer unit - boomerang



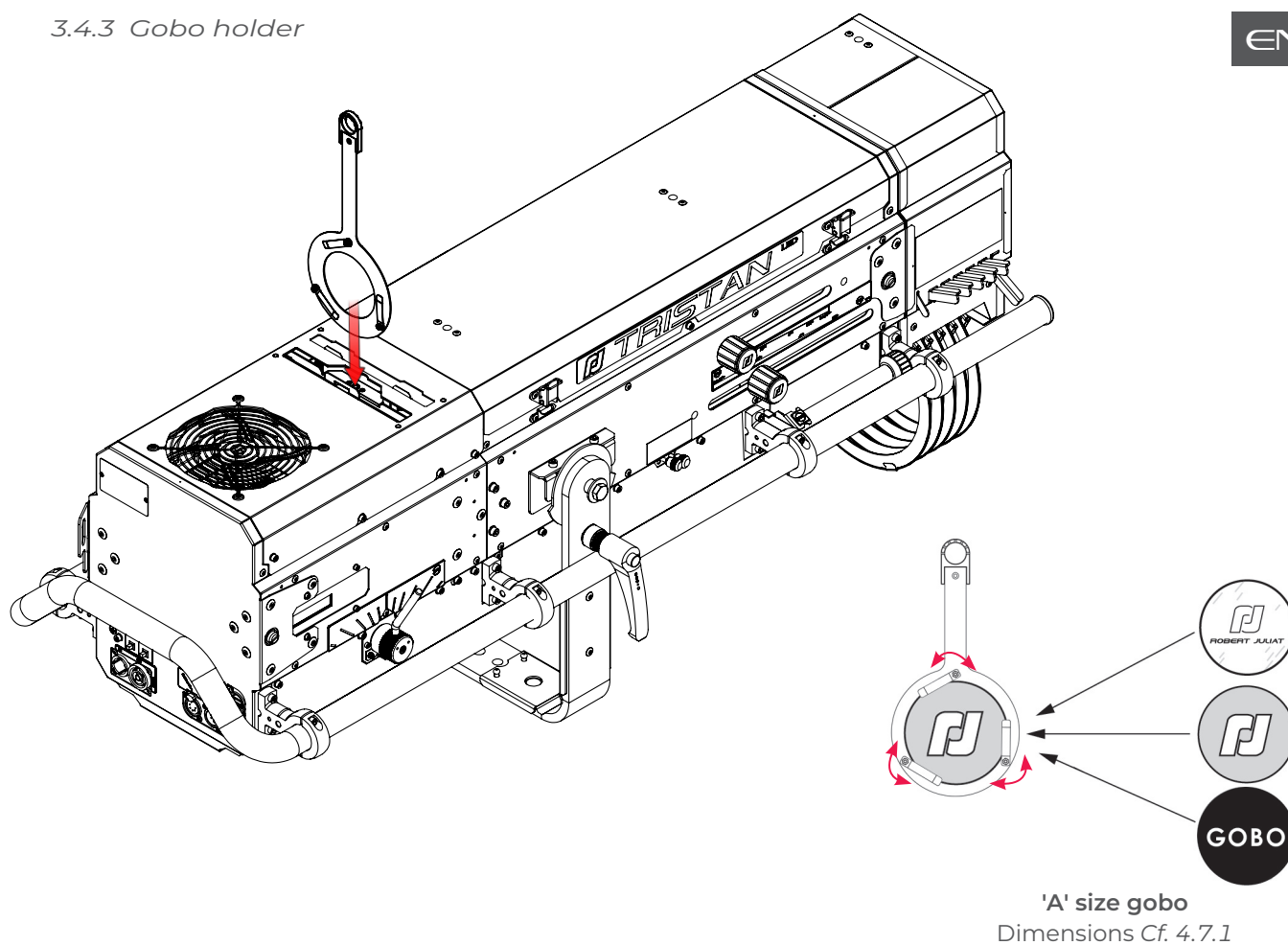
Dimensions Cf. 4.8.1



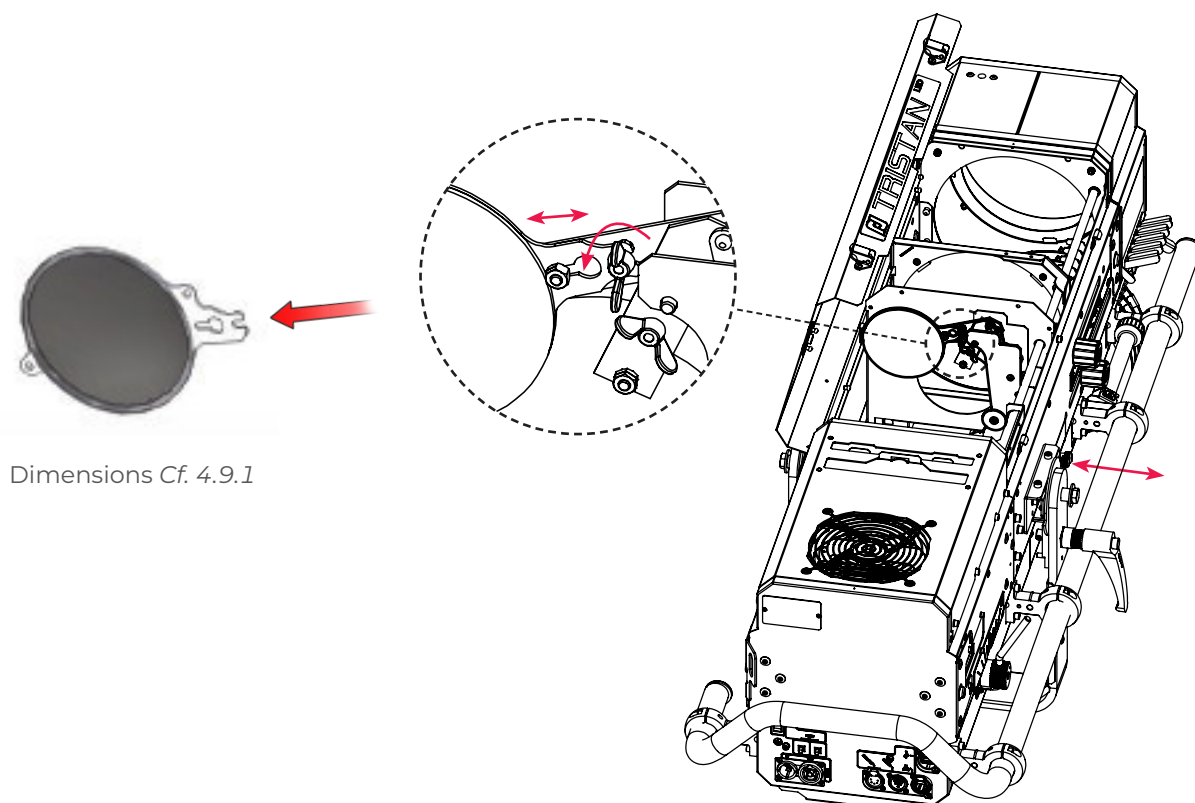


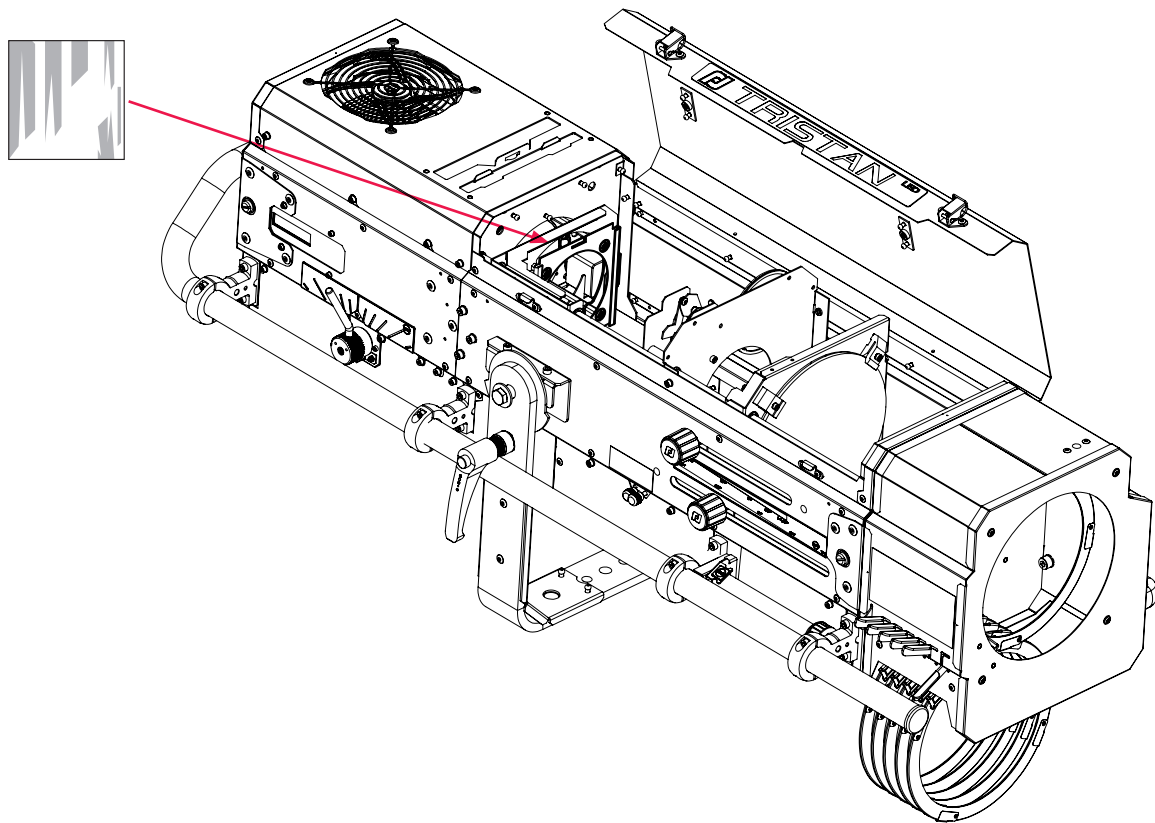
### 3.4.3 Gobo holder

EN

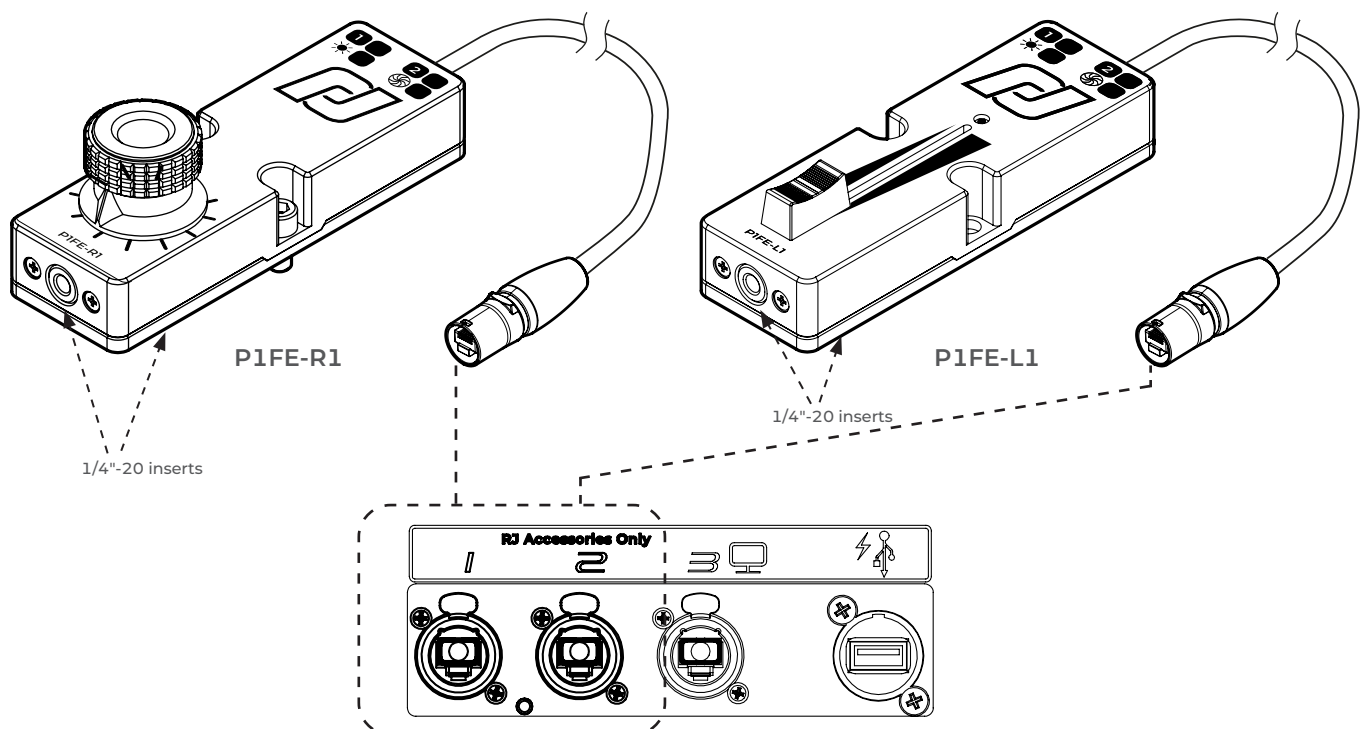


### 3.4.4 Frost / Correction filter



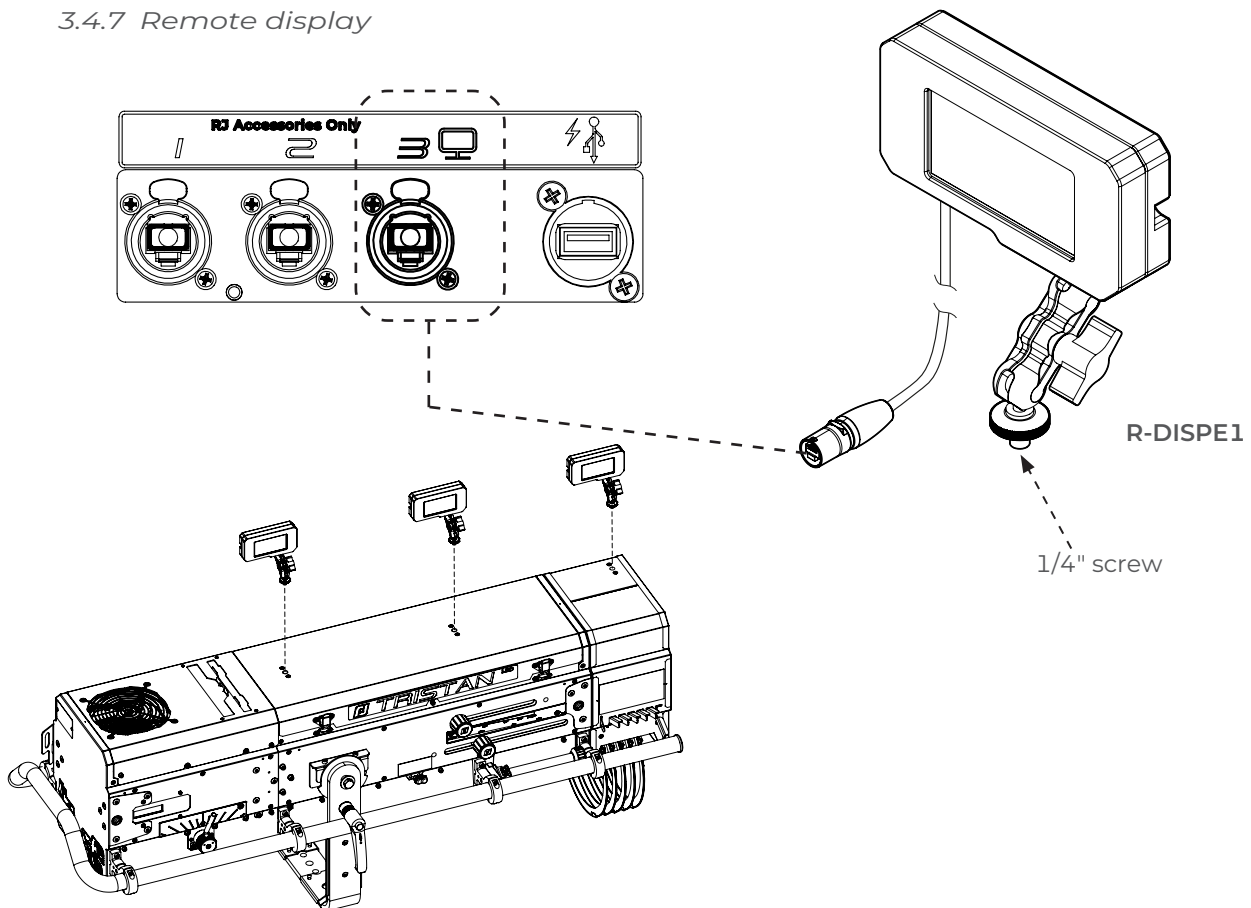


### 3.4.6 Remote controls

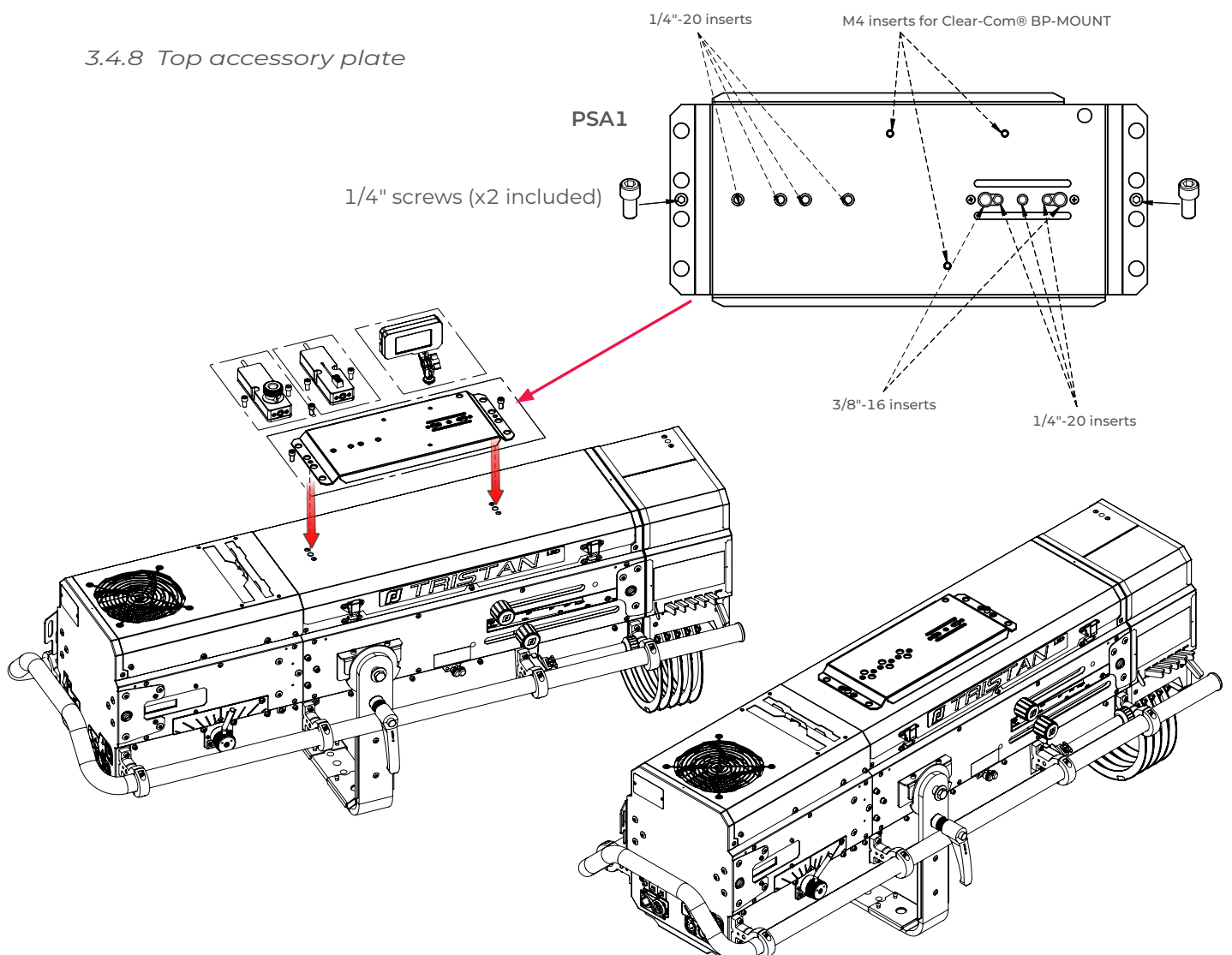


### 3.4.7 Remote display

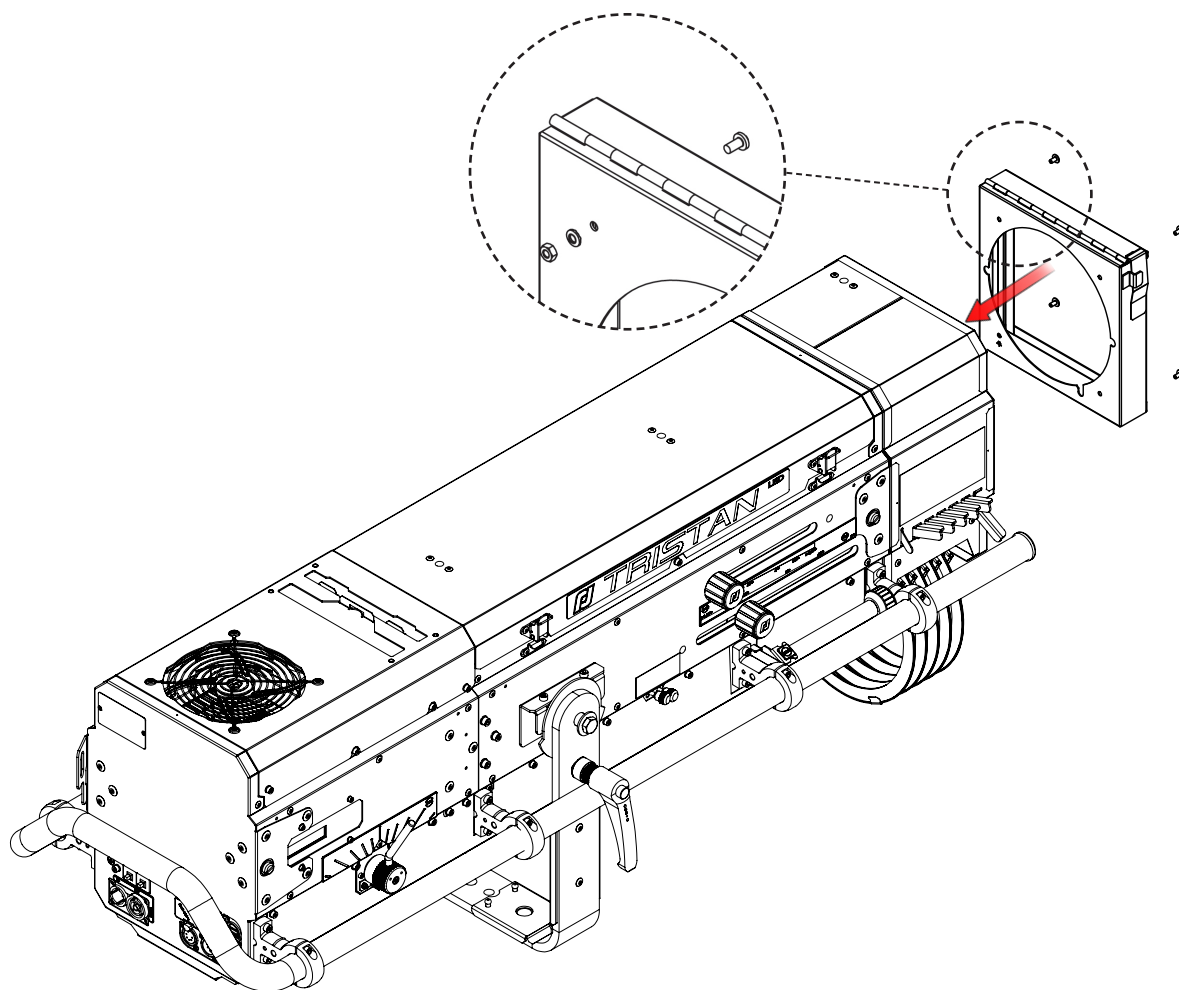
EN



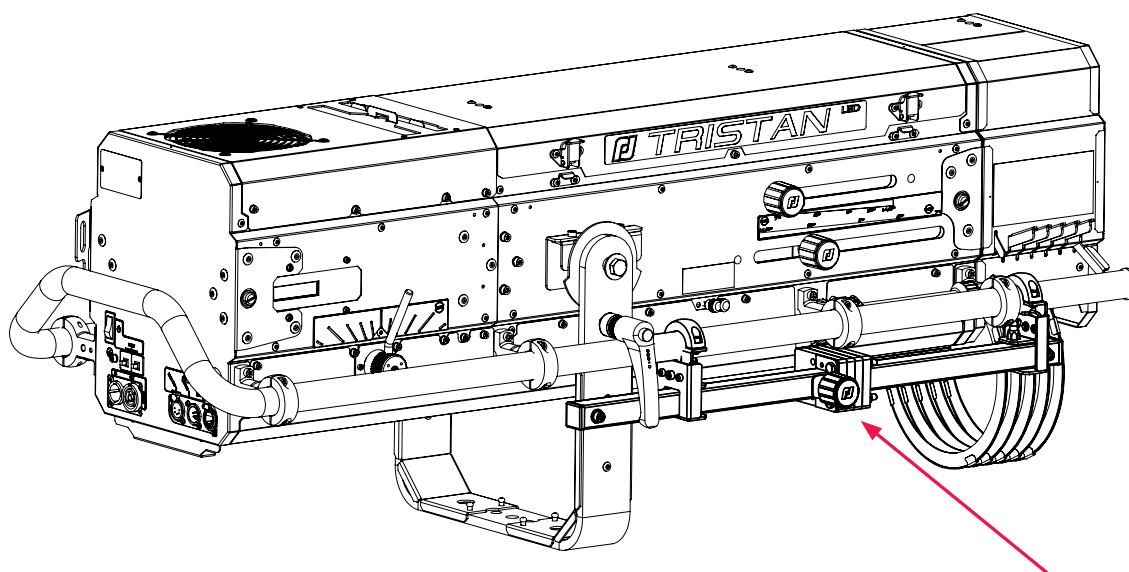
### 3.4.8 Top accessory plate

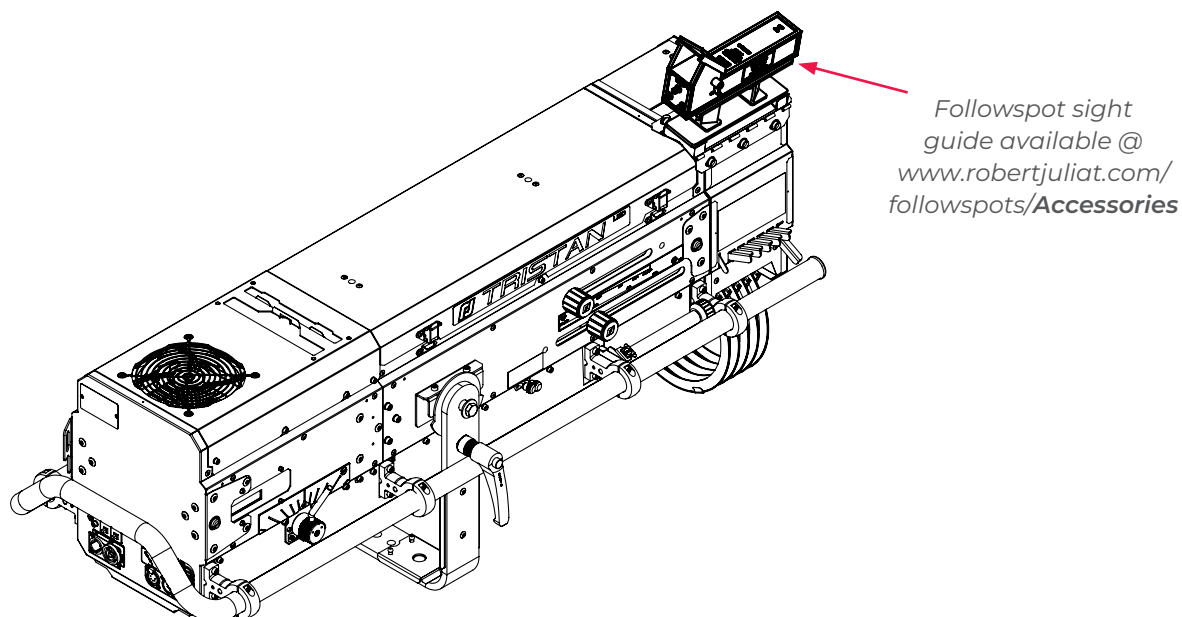


### 3.4.9 Double slot front cassette for 215 x 215 mm accessories



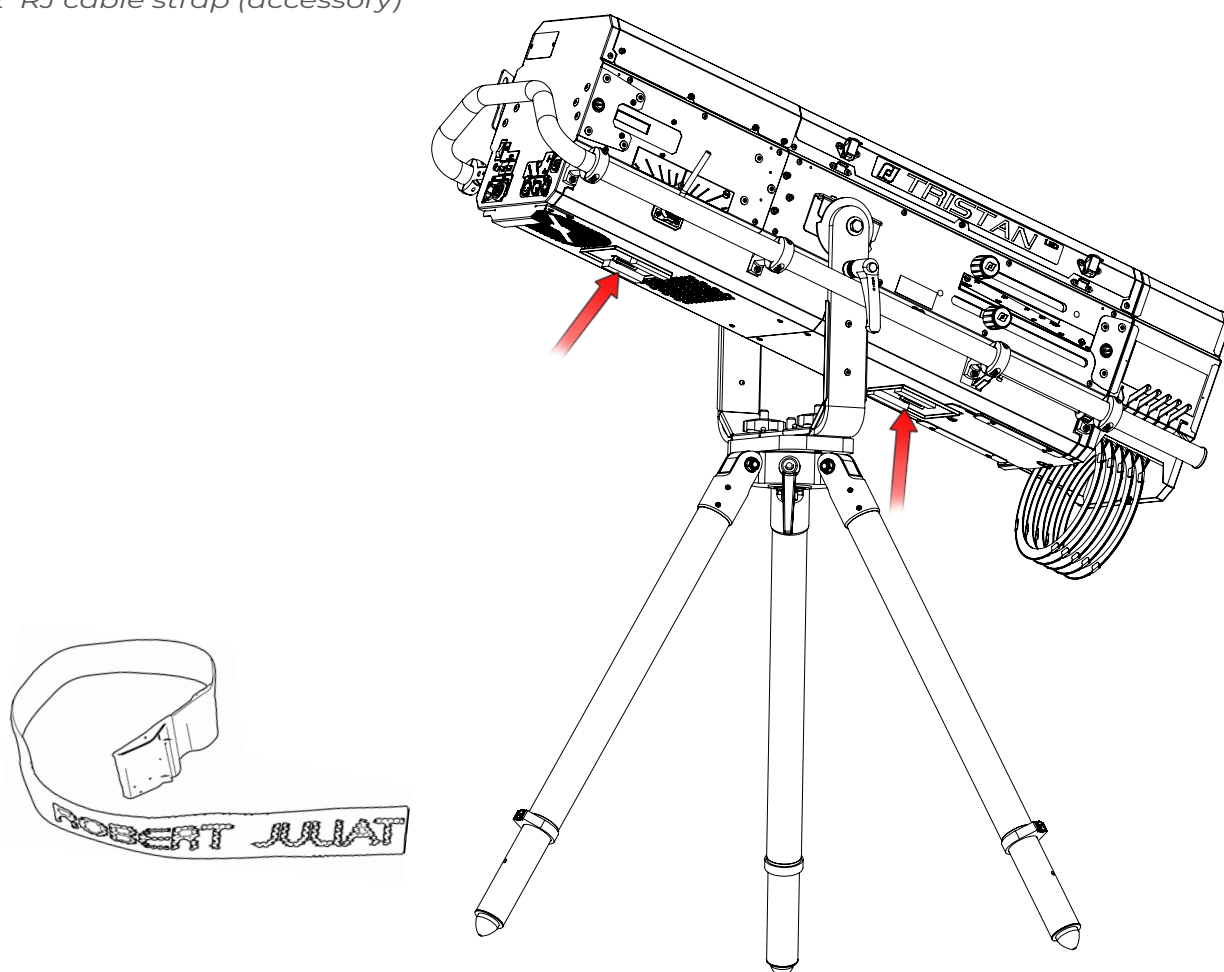
### 3.4.10 Counterweight



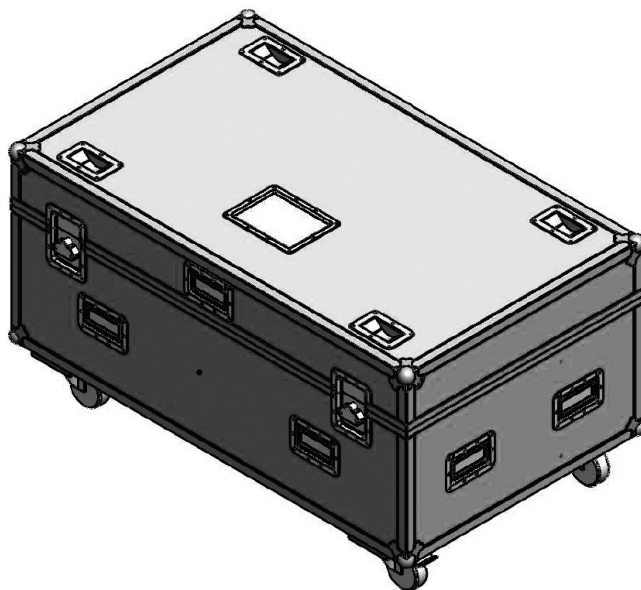


**Caution:** - Do not install the followspot sight on the lamp house to avoid blocking the ventilation vents.  
- Secure the sight with a suitable safety cable.

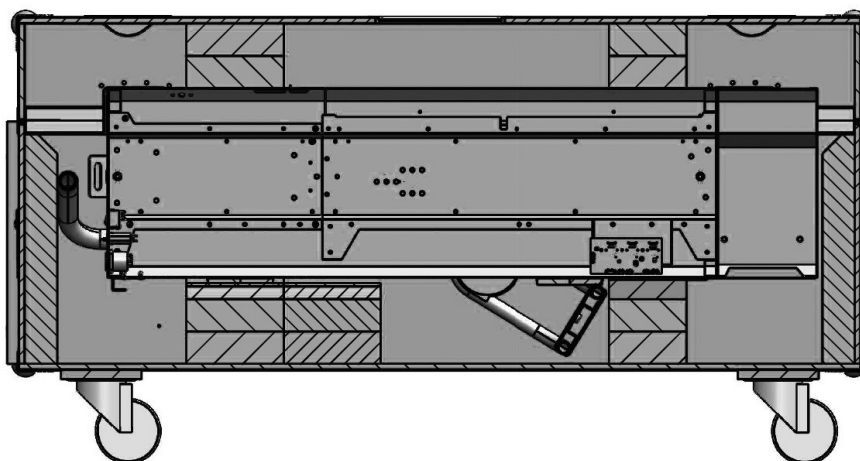
3.4.12 RJ cable strap (accessory)



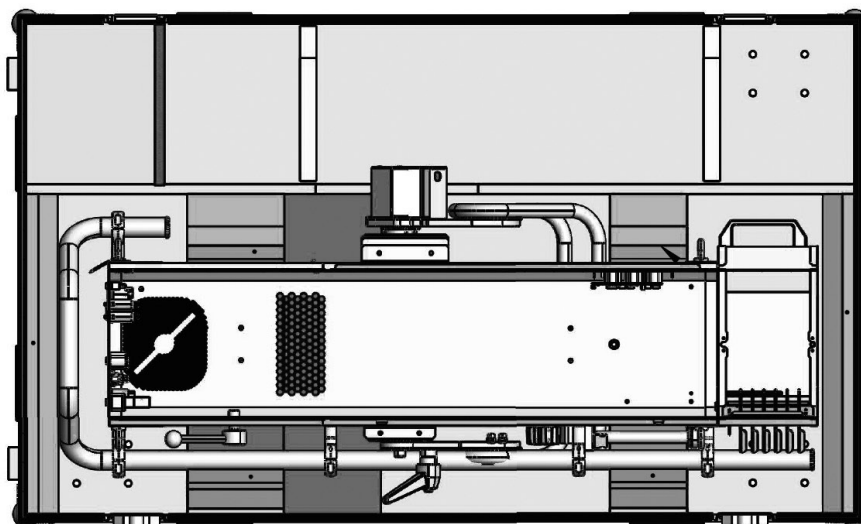
### 3.4.13 Flight-case



*Inner side view*



*Inner overhead view*

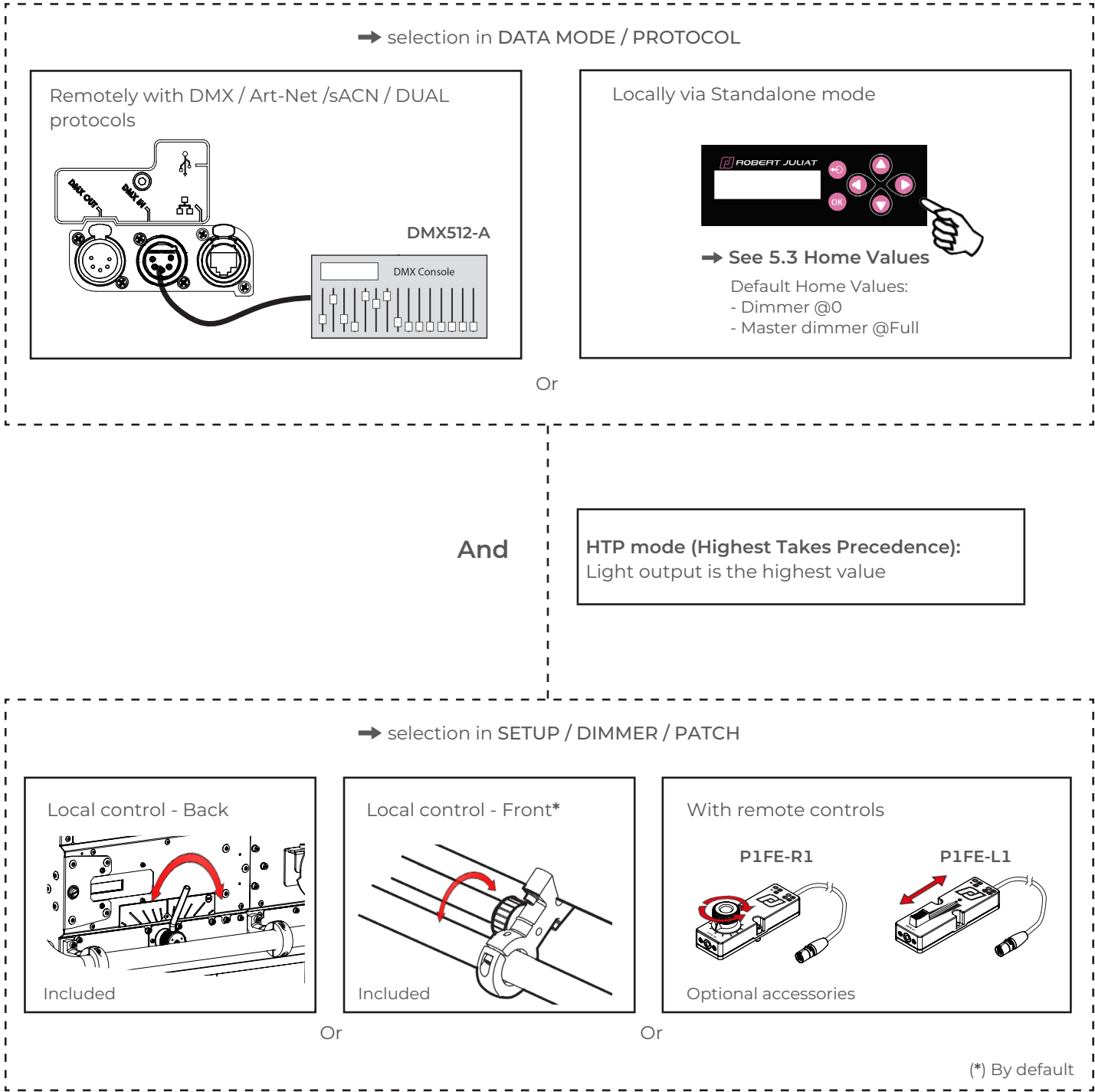


4.1 Light intensity

4.1.1 Range



4.1.2 Control

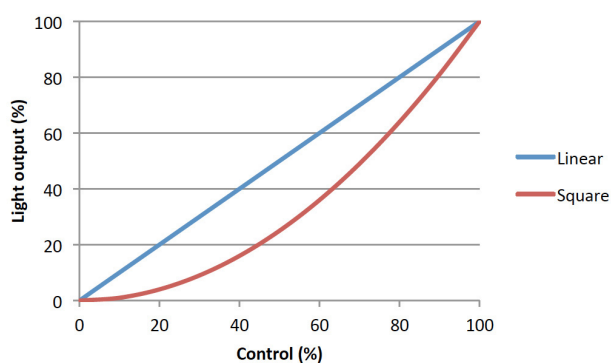


## 4.1.3.1 Dimming resolution - DMX only

| Resolution             | DMX mode |
|------------------------|----------|
| 8 bits – 255 steps     | 1        |
| 16 bits – 65 535 steps | 2, 3, 4  |

## 4.1.3.2 Dimming curve

➔ selection in SETUP / DIMMER / CURVE menu: LINEAR or SQUARE



## 4.1.3.3 Master control

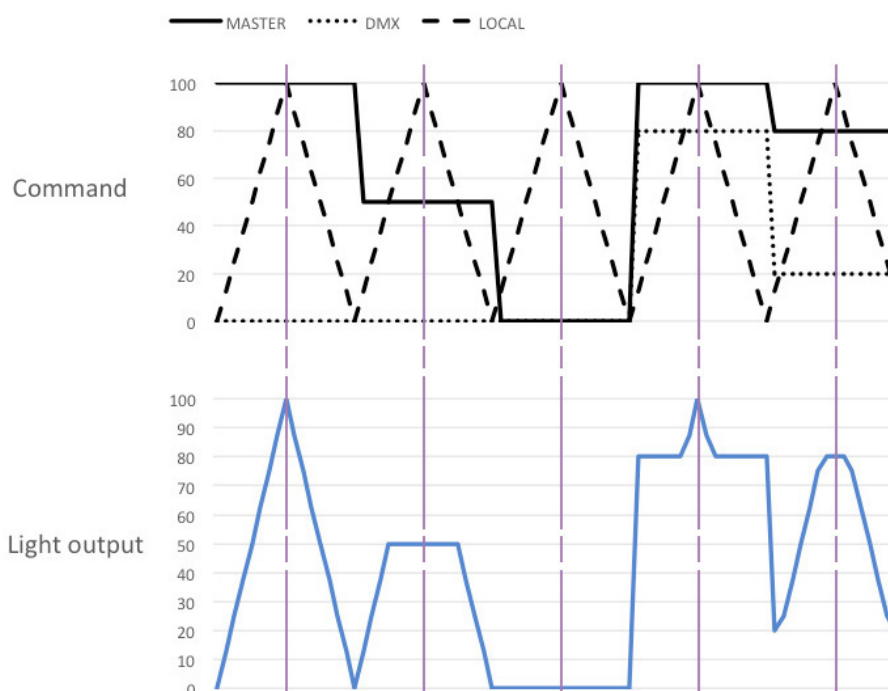
➔ DMX Mode 3 & 4

In order to supervise the operator from the console, master control DMX channel can be used.

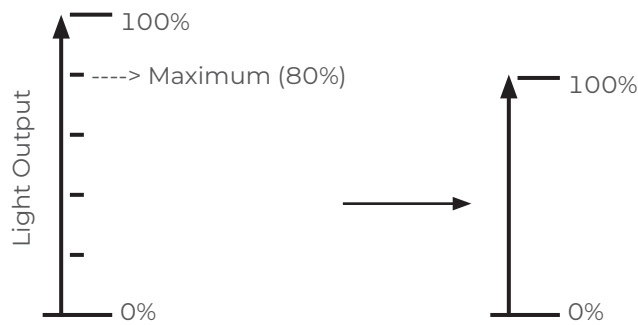
This channel limits the maximum value of the dimmer shutter.

By using this function, it is possible to obtain synchronised fades with several spots or to give intensity limits (minimum and maximum) to the operator.

Master is only active when DMX is detected.



➔ Selection in SETUP / DIMMER / MAX menu



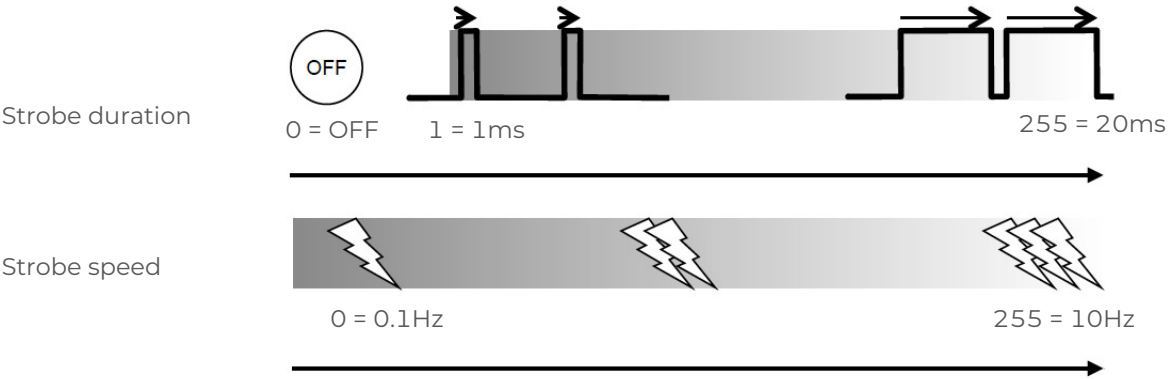
4.1.3.5 Dimming mode

➔ Selection in SETUP / DIMMER / DIMMING MODE menu

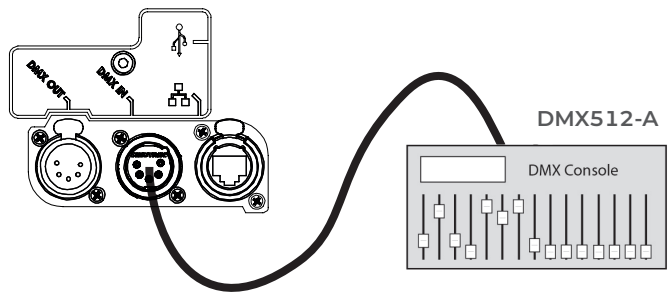
| Mode        | Result                               |
|-------------|--------------------------------------|
| Without PWM | Flicker-Free, perfect for filming    |
| PWM 17 KHz  | Good dimming quality (Default Value) |
| PWM 3.2 KHz | Very good dimming                    |

4.2 Strobe

4.2.1 Range



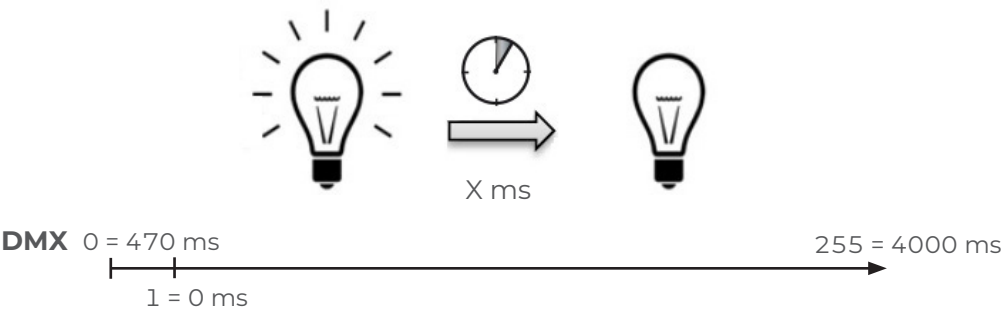
4.2.2 Control



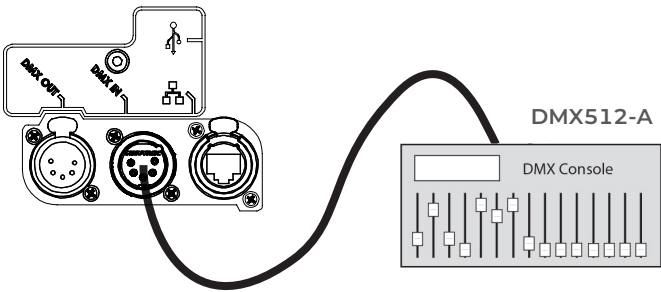
➔ Remotely with  
DMX512-A / Art-Net / sACN protocols  
Mode 2, 3 & 4

4.3 Response time

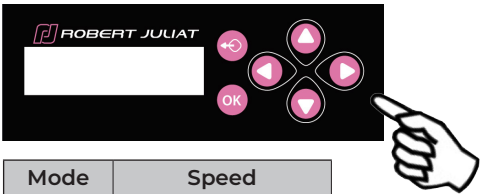
4.3.1 Range



4.3.2 Control



→ Remotely, with  
DMX512-A / Art-Net / sACN protocols  
Mode 2, 3 & 4

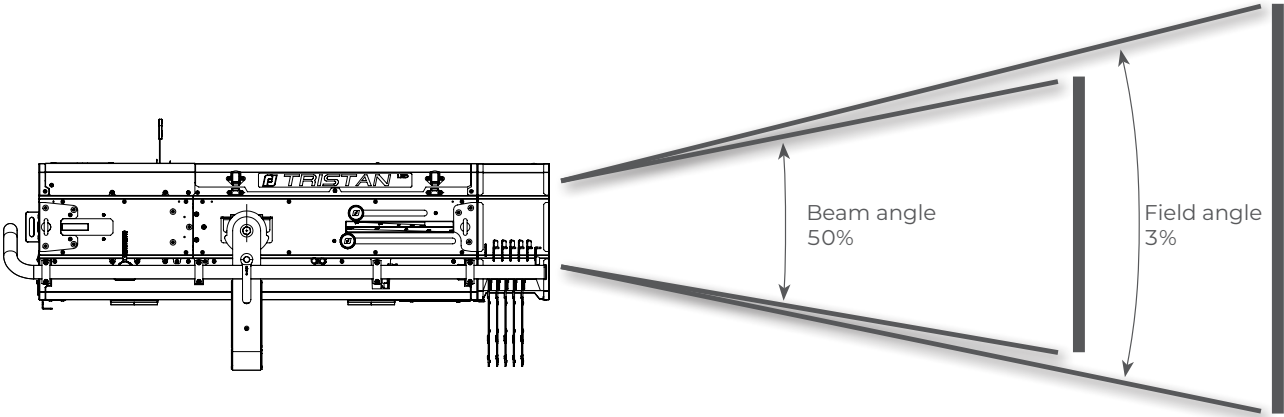


| Mode   | Speed       |
|--------|-------------|
| NONE   | OFF         |
| SLOW   | 700 ms      |
| MEDIUM | 470 ms      |
| FAST   | 350 ms      |
| CUSTOM | 0 - 4000 ms |

→ STANDALONE  
or  
DMX 512-A / Art-Net / sACN protocols  
Mode 1  
→ selection in  
SETUP / DIMMER / RESPONSE TIME  
(or HOME VALUE)

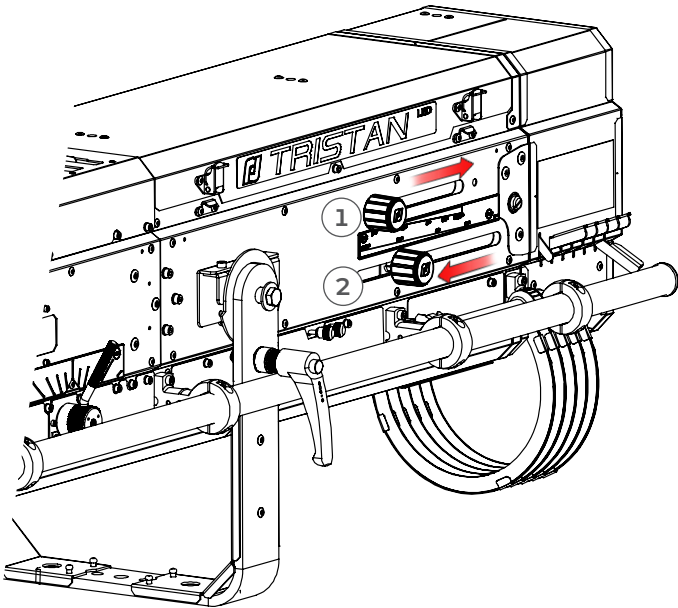
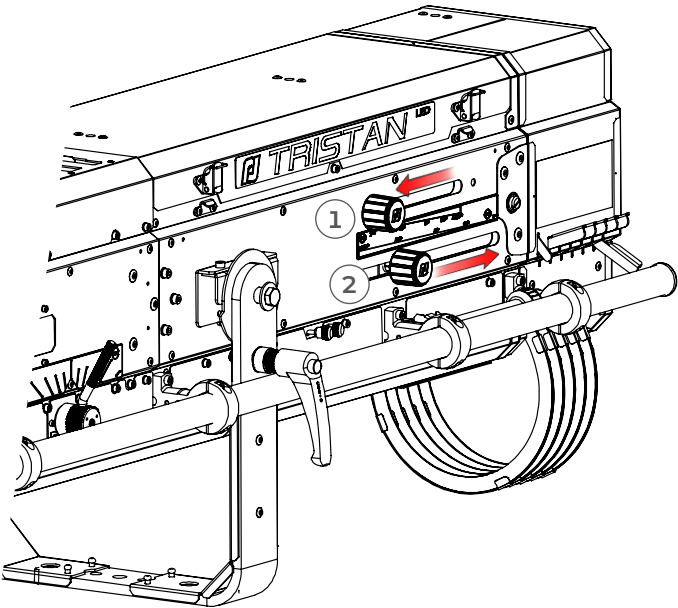
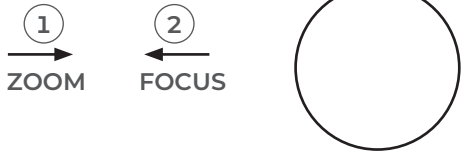
4.4 Beam size adjustment

4.4.1 Range



| Model                   | Angles      | Minimum angle | Maximum angle |
|-------------------------|-------------|---------------|---------------|
| TRISTAN<br>1189 & 1189C | Beam angle  | 7,1°          | 13,6°         |
|                         | Field angle | 7,3°          | 14,7°         |

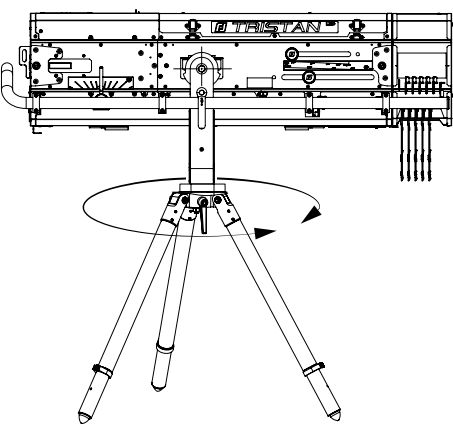
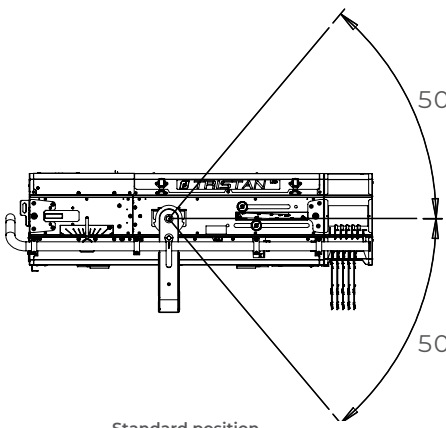
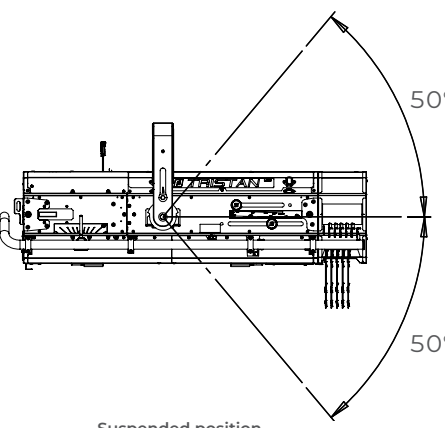
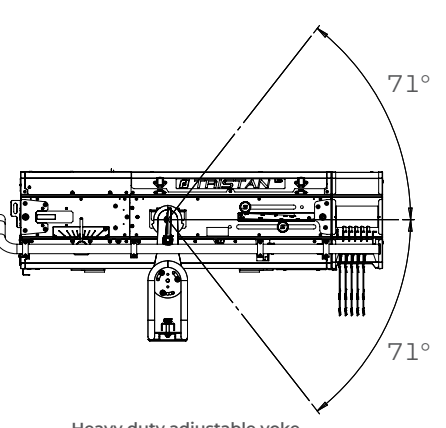
4.4.2 Control



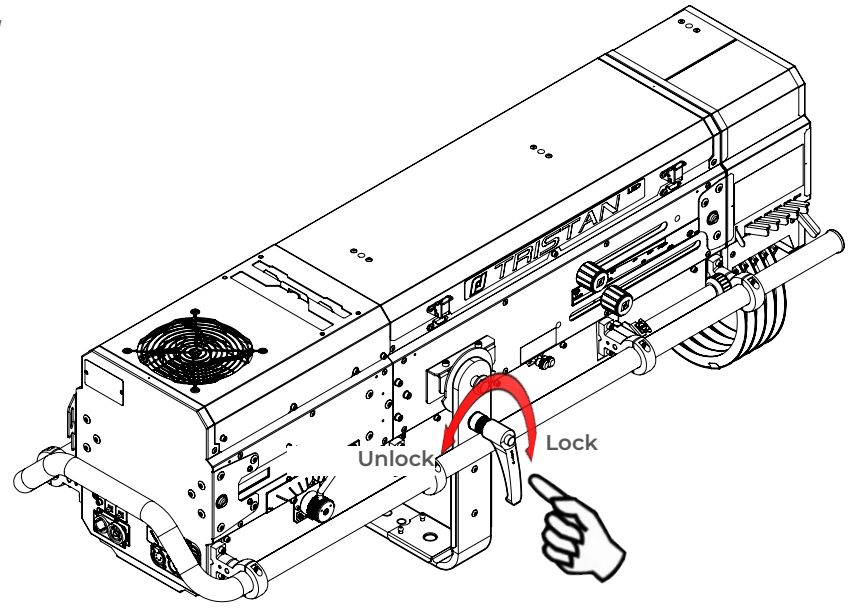
4.5 Pan / Tilt



4.5.1 Range

| Function                                                                                                                                                                                                                                                                                                                                                                    | Range           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <p>PAN</p>                                                                                                                                                                                                                                                                                 | <p>0 → 360°</p> |
| <p>TILT</p> <div><p>Standard position</p><p>Suspended position</p><p>Heavy duty adjustable yoke (option)</p></div> |                 |

4.5.2 Control



## 4.6 Iris

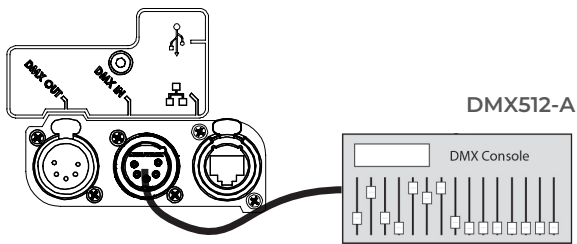
### 4.6.1 Range



### 4.6.2 Control

→ selection in DATA MODE / PROTOCOL

Remotely with DMX / Art-Net / sACN / DUAL protocols - Mode 4



Locally via Standalone mode or DMX / Art-Net / sACN / DUAL protocols - Mode 1, 2 & 3



Default Home Values:  
-Iris @0

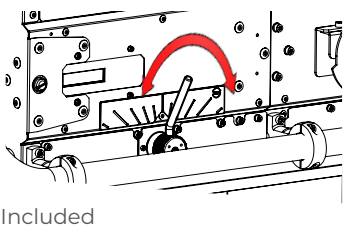
Or

And

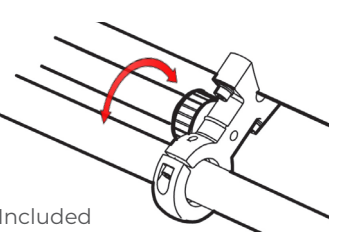
**HTP mode (Highest Takes Precedence):**  
Light output is the highest value

→ selection in SETUP / DIMMER / PATCH

Local control - Back\*



Local control - Front

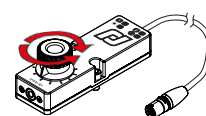


Or

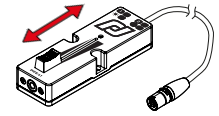
Or

With remote controls

P1FE-R1



P1FE-L1



Optional accessories

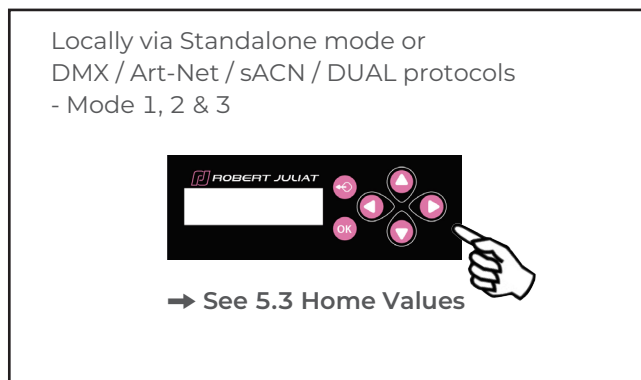
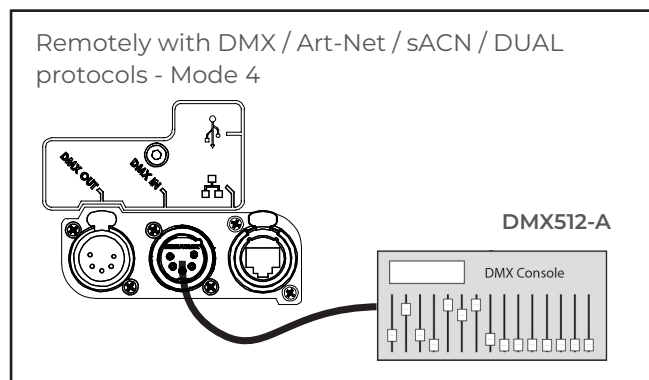
(\*) By default

## 4.6.3.1 Iris mode



4 modes: Slow / Medium / Fast / None

Control:



Or

## 4.6.3.2 Iris max

→ selection in SETUP / IRIS / RESET / IRIS MAX

Iris maximum opening value: 100% → 10%



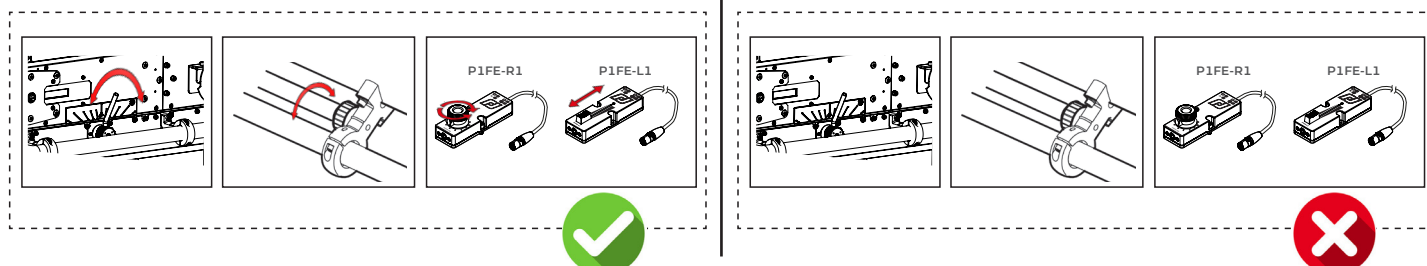
## 4.6.3.3 Disable local

→ selection through SETUP / LOCAL POTENTIOMETER / IRIS / SETUP / DISABLE

"Control Mode" channel

IRIS LOCAL ON

IRIS LOCAL OFF



➔ selection through DMX / Art-Net / sACN / DUAL protocols - Mode 2, 3 & 4

"Control Mode" channel

Or

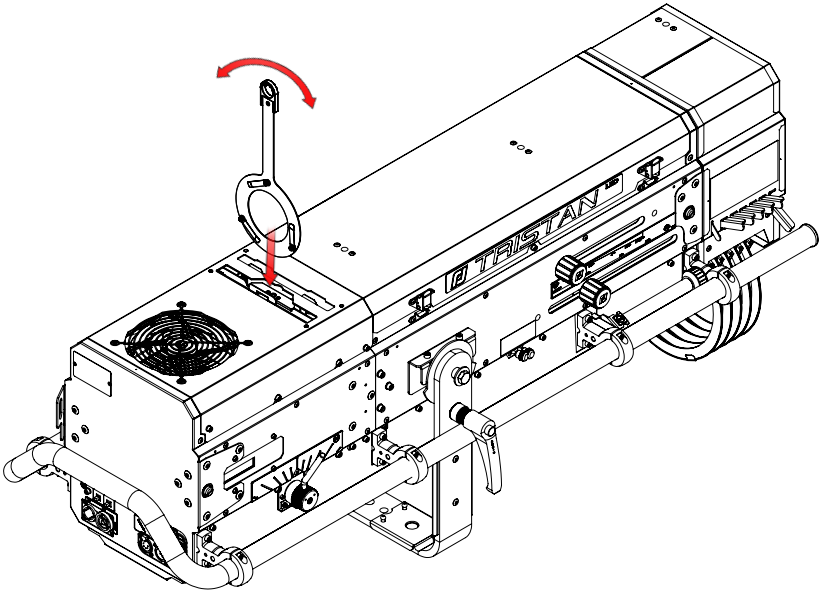
➔ selection in SETUP / IRIS / RESET

4.7 Gobo

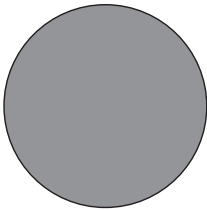
4.7.1 Range

|              |                                                                                                                                                  |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Type         | Standard gobo - A size                                                                                                                           |
| Dimensions   | <div><div><div>Ø100 mm</div><div><div>Ø72 mm</div><div>Maximum image size</div></div></div><div><div>• Metal</div><div>• Glass</div></div></div> |
| Installation | Cf. section: 3.4.4                                                                                                                               |

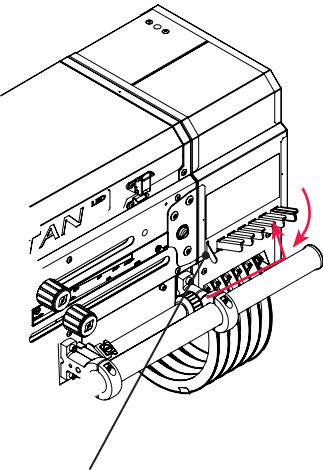
4.7.2 Control



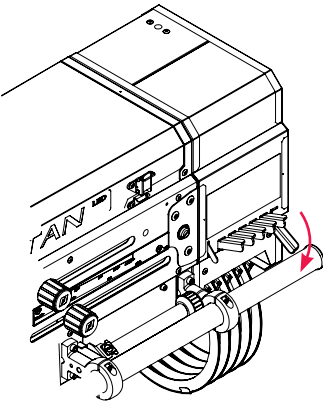
4.8.1 Range

|              |                                                                                                             |
|--------------|-------------------------------------------------------------------------------------------------------------|
| Type         | Coloured gel filter                                                                                         |
| Dimension    | <div><p>Ø210 mm</p></div> |
| Installation | <p>Cf. section: 3.4.2 &amp; section 3.4.3</p> <p>Place dark colours towards the front end.</p>              |

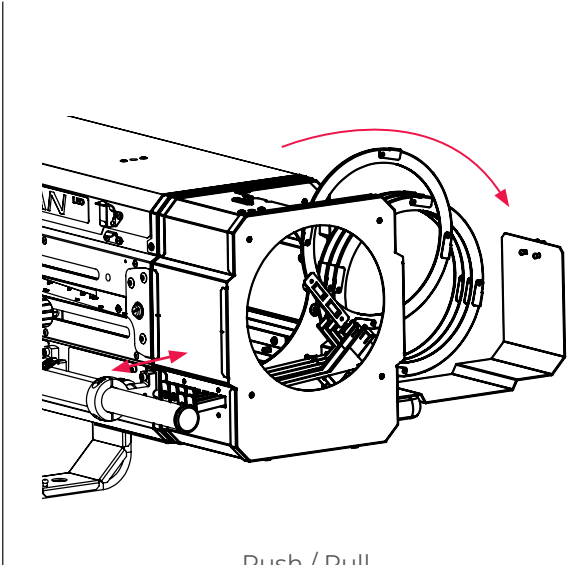
4.8.2 Control



Unlock = release colours



Colour engaged

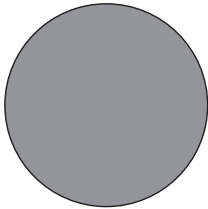


Push / Pull

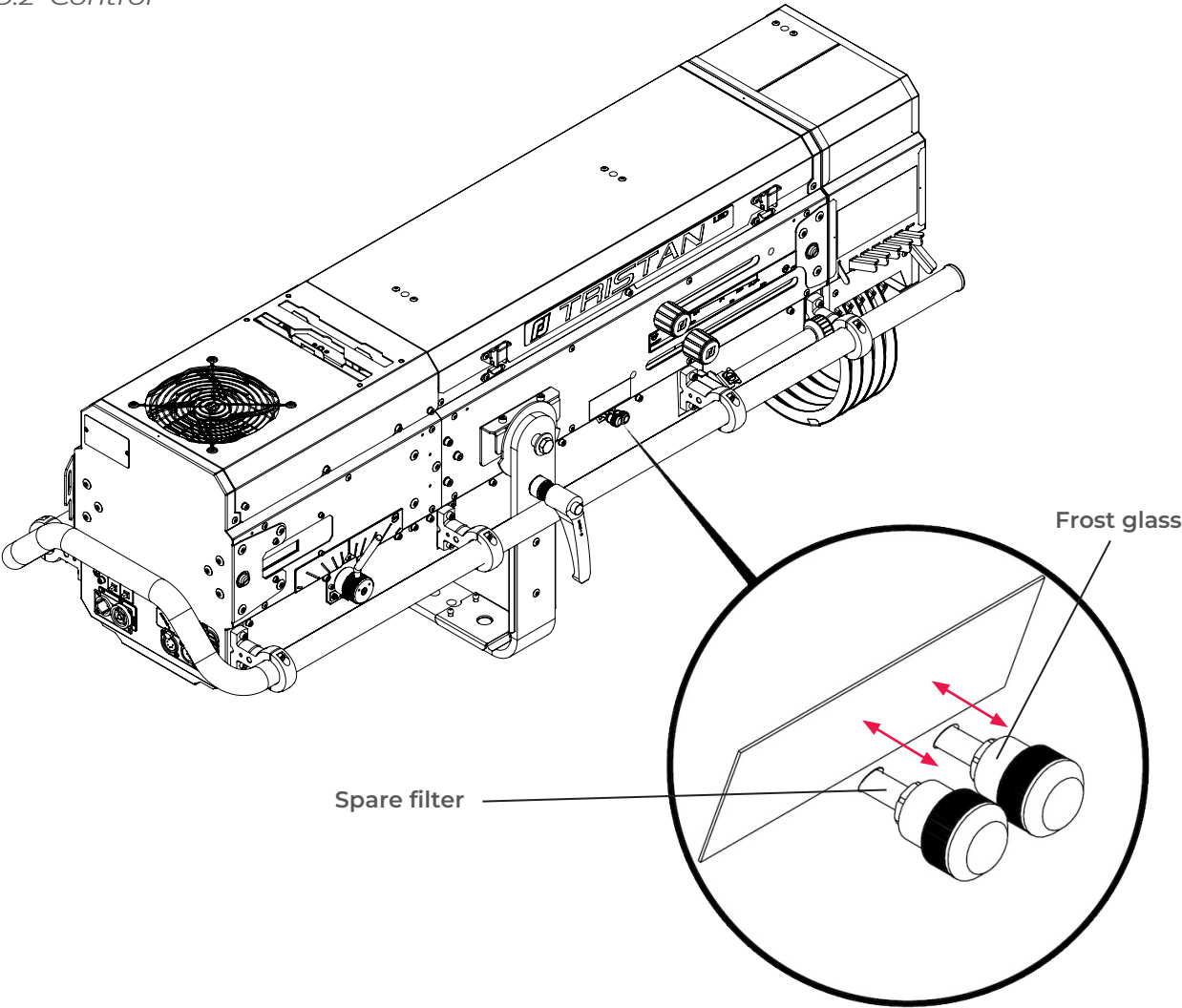
4.9 Frost and correction filters



4.9.1 Range

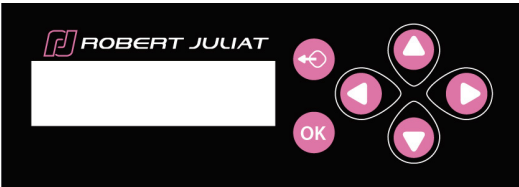
|              |                                                                                                                 |
|--------------|-----------------------------------------------------------------------------------------------------------------|
| Type         | Frost or Correction filter                                                                                      |
| Dimension    | <div>Ø97 mm</div> <div></div> |
| Installation | Cf. section: 3.4.6                                                                                              |

4.9.2 Control



5.1 Local display and controls

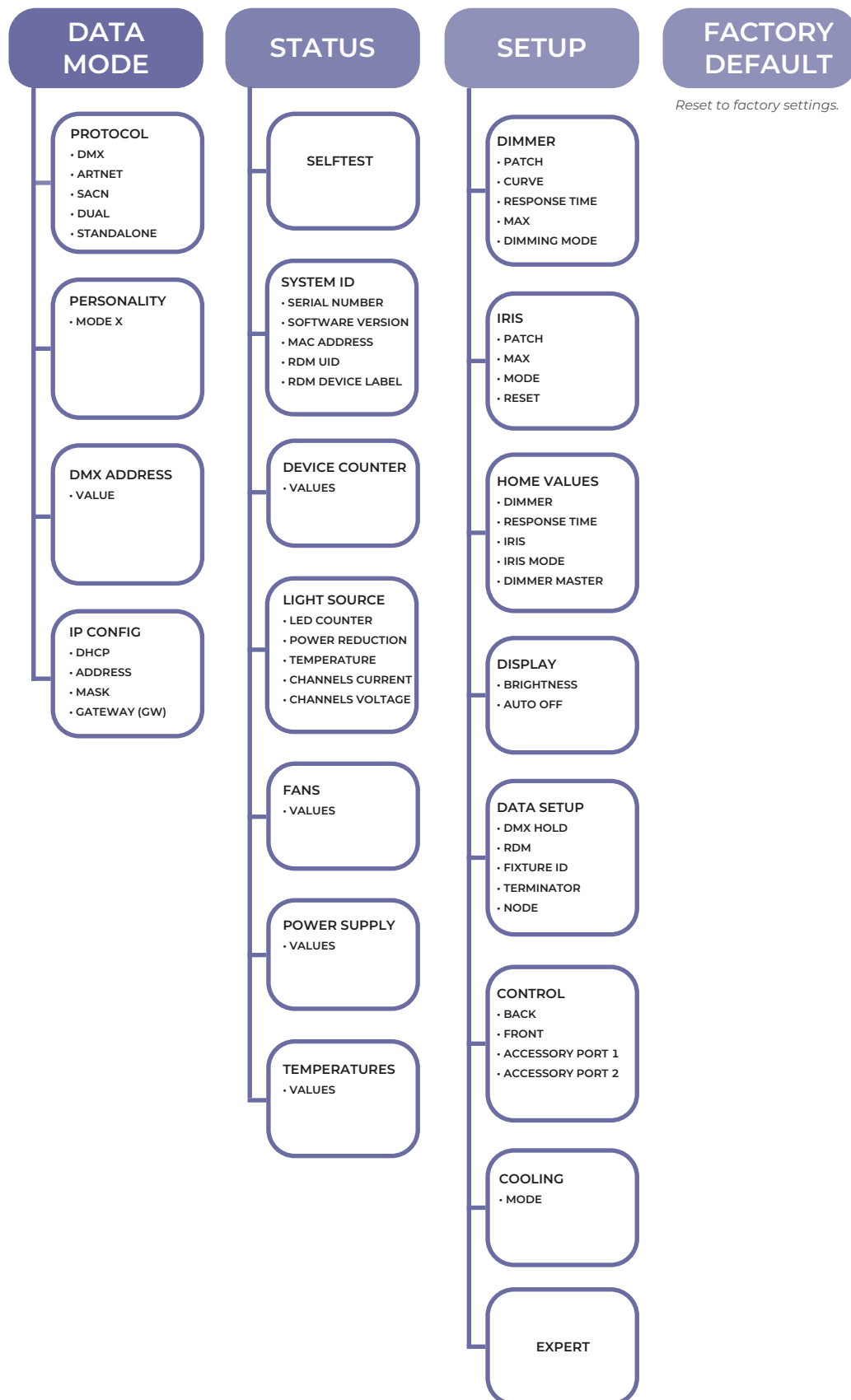
5.1.1 Display



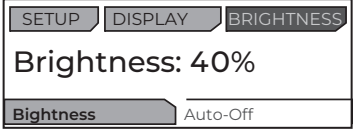
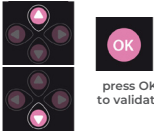
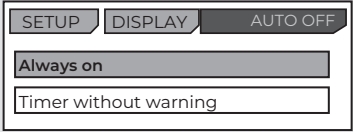
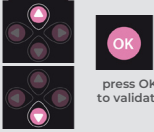
| Function |                                                 |
|----------|-------------------------------------------------|
|          | Exit the current menu option and/or go back     |
|          | Enter the current menu option and/or valid      |
|          | Scroll through menus and/or Increase data value |
|          | Scroll through menus and/or Decrease data value |
|          | Scroll through menus and/or Increase data value |
|          | Scroll through menus and/or Decrease data value |

5.1.2 Home screen

| Display                                                                                                                                                | Mode        | Description                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------|
| <div>DUAL : NO LINK      HOLD</div> <div>NO DMX</div> <div>DIMMER: 00 : 6500K</div>                                                                    | Home        | Main display (home screen) |
| <div>Diagnostic</div> <div>Nothing to report</div>                                                                                                     | <br>x1 push | Diagnostics                |
| <div>Link status : NOK    DHCP : OFF</div> <div>IP        192.168.000.013</div> <div>MASK    255.255.255.000</div> <div>GW       192.168.000.001</div> | <br>x1 push | Network information        |
| <div>DUAL OFF              RDM : ON</div> <div>Channel: 001    SACN   Uni: 1</div> <div>PROFILE 16B</div>                                              | <br>x2 push | DMX information            |
| <div>DIM <input type="text"/> 000%</div> <div>IRIS <input type="text"/> 000%</div>                                                                     | <br>x2 push | Followspot Mode            |



→ Selection in menu: SETUP / DISPLAY

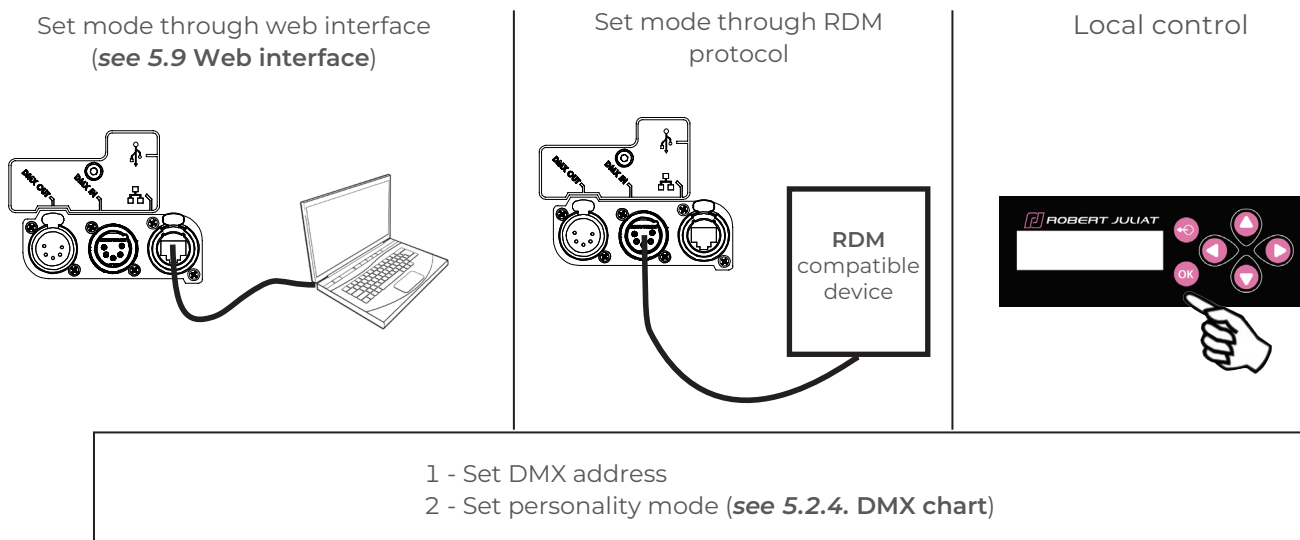
| Display                                                                           | Function   | Description                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Brightness | Adjust the intensity of the screen<br>To change value, press buttons:<br><br>press OK to validate                                                                                                        |
|  | Auto-OFF   | To keep the main display (home screen) always ON, select :<br><b>Always ON</b><br>Timer without warning<br>Timer with warning<br><br>press OK to validate<br><br>Main display turns OFF after 20 seconds |

## 5.2 DMX512 - A remote control

### 5.2.1 Protocol

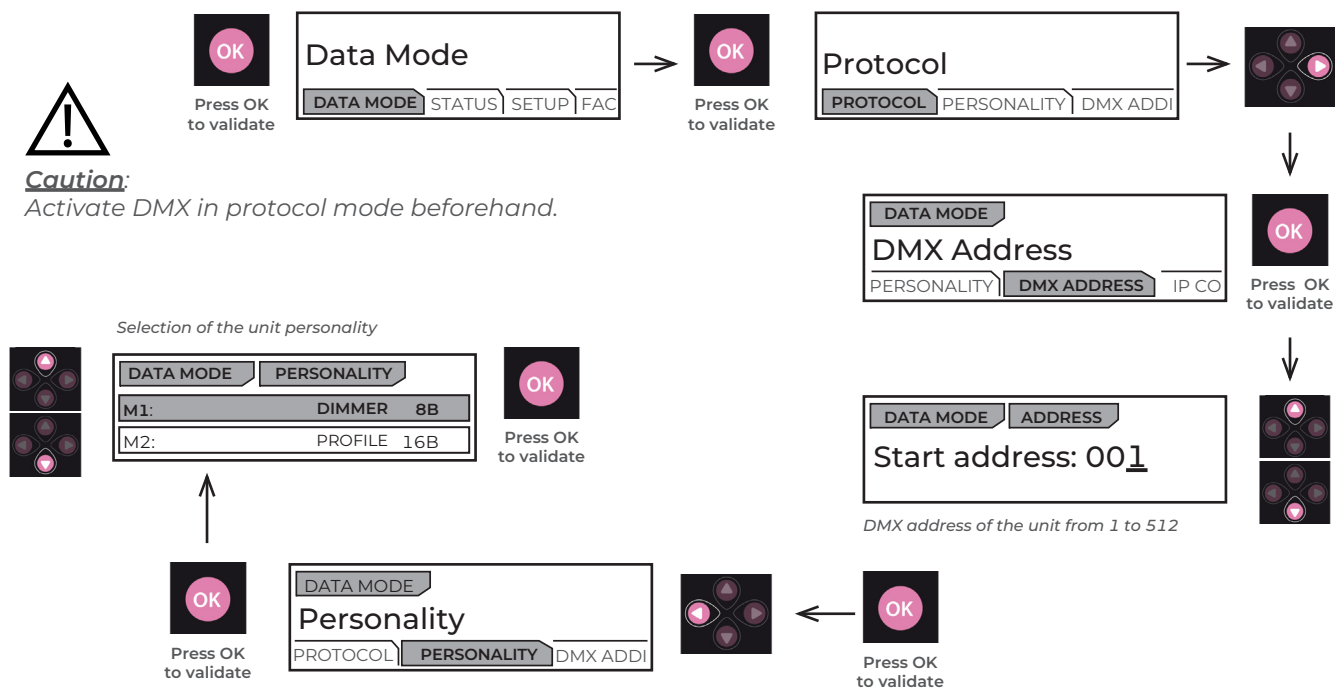
E1.11 – 2008, USITT DMX512-A

### 5.2.2 Configuration



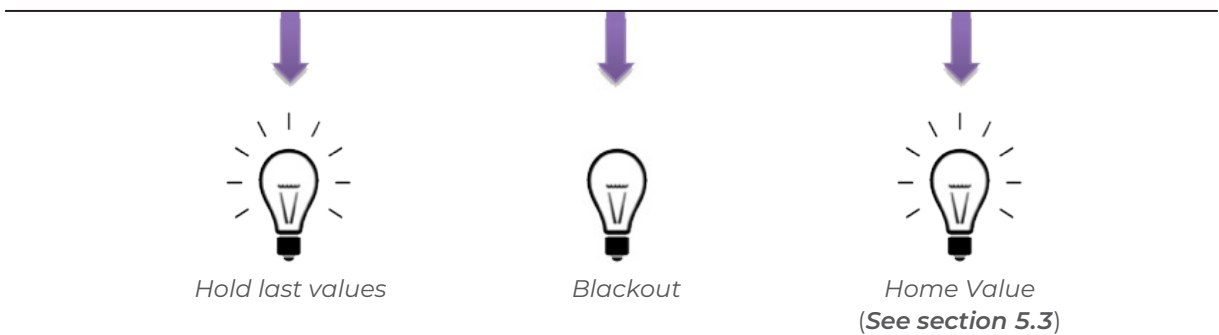
**Caution:**

Activate DMX in protocol mode beforehand.



5.2.3.1 DMX Hold

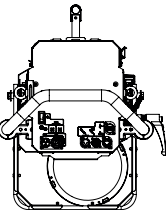
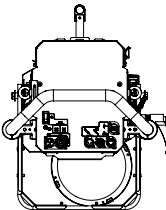
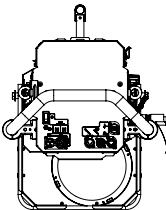
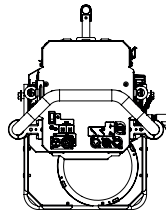
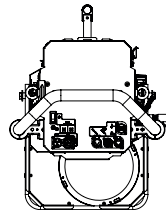
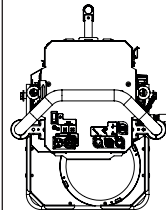
→ Selection in **SETUP / Data Setup / DMX HOLD** menu



5.2.3.2 User ID

→ Selection in **SETUP / Data Setup / USER ID** menu

Each unit can be identified by a User ID number  
– Once defined, the User ID is displayed on the Home screen.

|                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|---------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Example:<br>Installation with 6 units |  |  |  |  |  |  |
| Home screen<br>information            | ID1 @ 101                                                                           | ID2 @ 123                                                                           | ID3 @ 145                                                                           | ID4 @ 167                                                                            | ID5 @ 189                                                                             | ID6 @ 211                                                                             |
| User ID                               | 1                                                                                   | 2                                                                                   | 3                                                                                   | 4                                                                                    | 5                                                                                     | 6                                                                                     |
| DMX address                           | 101                                                                                 | 123                                                                                 | 145                                                                                 | 167                                                                                  | 189                                                                                   | 211                                                                                   |

### 5.2.4 DMX chart

| DMX Channel | Mode 1:<br>Dimmer 8B | Mode 2:<br>Profile 16B | Mode 3:<br>Followspot 16B | Mode 4:<br>Followspot 16B IRIS |
|-------------|----------------------|------------------------|---------------------------|--------------------------------|
| 1           | Dimmer               | Dimmer                 | Dimmer                    | Dimmer                         |
| 2           |                      | Dimmer fine            | Dimmer fine               | Dimmer fine                    |
| 3           |                      | Strobe duration        | Master                    | Master                         |
| 4           |                      | Strobe speed           | Master fine               | Master fine                    |
| 5           |                      | Response time          | Strobe duration           | Strobe duration                |
| 6           |                      | Control mode           | Strobe speed              | Strobe speed                   |
| 7           |                      |                        | Response time             | Response time                  |
| 8           |                      |                        | Control mode              | Control mode                   |
| 9           |                      |                        |                           | Iris                           |
| 10          |                      |                        |                           | Iris mode                      |

### 5.2.5 DMX ranges

#### 5.2.5.1 Strobe duration

| Range min | Range max | Function                 |
|-----------|-----------|--------------------------|
| 0         | 0         | Strobe OFF               |
| 1         | 255       | Strobe ON - 1 ms → 20 ms |

#### 5.2.5.2 Strobe speed

| Range min | Range max | Function                  |
|-----------|-----------|---------------------------|
| 0         | 255       | Frequency: 0,1 Hz → 10 Hz |

#### 5.2.5.3 Response time

| Range min | Range max | Function                 |
|-----------|-----------|--------------------------|
| 0         | 0         | 470 ms (medium)          |
| 1         | 255       | Response time: 0 s → 4 s |

#### 5.2.5.4 Control mode\*

| Gamme min | Gamme max | Fonction                 |
|-----------|-----------|--------------------------|
| 0         | 0         | -                        |
| 1         | 10        | RDM OFF                  |
| 11        | 20        | RDM ON                   |
| 21        | 30        | Fixture Reset            |
| 31        | 40        | Dimmer Curve Linear      |
| 41        | 50        | Dimmer Curve Square      |
| 51        | 60        | Not used                 |
| 61        | 70        | Not used                 |
| 71        | 80        | Not used                 |
| 81        | 90        | Not used                 |
| 91        | 100       | Not used                 |
| 101       | 110       | Cooling mode: Silent     |
| 111       | 120       | Cooling mode: Normal     |
| 121       | 130       | Cooling mode: Full power |
| 161       | 170       | Iris local off           |
| 171       | 180       | Iris local on            |
| 181       | 190       | Motor reset              |
| 131       | 255       | Not used                 |

(\*) Function activated after 5 seconds - needs to go back to zero to activate second function.

#### 5.2.5.5 Iris

| Range min | Range max | Function      |
|-----------|-----------|---------------|
| 0         | 0         | Iris open     |
| 0         | 255       | Open → Closed |
| 255       | 255       | Iris closed   |

#### 5.2.5.6 Iris mode

| Range min | Range max | Function          |
|-----------|-----------|-------------------|
| 0         | 9         | Fast              |
| 10        | 19        | Medium            |
| 20        | 29        | Slow              |
| 30        | 39        | None              |
| 40        | 255       | Not used (= Fast) |

## 5.2.6.1 Protocol

## ANSI E1.20 – 2010 / ANSI E1.37 - 1

For more information about RDM protocol: <http://www.rdmprotocol.org/>

## 5.2.6.2 Functions

| PID                   | Description                      | Standard   | Get | Set | Queued_Message | Ack_Timer | VERSION<br>4.00 |
|-----------------------|----------------------------------|------------|-----|-----|----------------|-----------|-----------------|
| Network Management    |                                  |            |     |     |                |           |                 |
| 00 01                 | DISCOVERY_UNIQUE_BRANCH          | E1.20      |     |     |                |           | ✓               |
| 00 02                 | DISCOVERY_MUTE                   | E1.20      |     | ✓   |                |           | ✓               |
| 00 03                 | DISCOVERY_UNMUTE                 | E1.20      |     | ✓   |                |           | ✓               |
| 00 15                 | COMMUNICATION_STATUS             | E1.20      | ✓   | ✓   |                |           | ✓               |
| Status Collection     |                                  |            |     |     |                |           |                 |
| 00 20                 | QUEUED_MESSAGE                   | E1.20      | ✓   |     |                |           | ✓               |
| 00 30                 | STATUS_MESSAGES                  | E1.20      | ✓   |     |                |           | ✓               |
| 00 31                 | STATUS_ID_DESCRIPTION            | E1.20      | ✓   |     |                |           | ✓               |
| 00 32                 | CLEAR_STATUS_ID                  | E1.20      |     | ✓   |                |           | ✓               |
| 00 33                 | QUEUED_MESSAGE_SENSOR_SUBSCRIBE  | E1.20-2023 | ✓   | ✓   |                |           |                 |
| RDM Information       |                                  |            |     |     |                |           |                 |
| 00 50                 | SUPPORTED_PARAMETERS             | E1.20      | ✓   |     |                |           | ✓               |
| 00 51                 | PARAMETER_DESCRIPTION            | E1.20      | ✓   |     |                |           | ✓               |
| Product Information   |                                  |            |     |     |                |           |                 |
| 00 60                 | DEVICE_INFO                      | E1.20      | ✓   |     |                | ✓         | ✓               |
| 00 70                 | PRODUCT_DETAIL_ID_LIST           | E1.20      | ✓   |     |                |           | ✓               |
| 00 80                 | DEVICE_MODEL_DESCRIPTION         | E1.20      | ✓   |     |                |           | ✓               |
| 00 81                 | MANUFACTURER_LABEL               | E1.20      | ✓   |     |                |           | ✓               |
| 00 82                 | DEVICE_LABEL                     | E1.20      | ✓   | ✓   | ✓              | ✓         | ✓               |
| 00 90                 | FACTORY_DEFAULTS                 | E1.20      | ✓   | ✓   |                | ✓         | ✓               |
| 00 C0                 | SOFTWARE_VERSION_LABEL           | E1.20      | ✓   |     |                | ✓         | ✓               |
| 00 C2                 | BOOT_SOFTWARE_VERSION_LABEL      | E1.20      | ✓   |     |                |           | ✓               |
| DMX512 Setup          |                                  |            |     |     |                |           |                 |
| 00 E0                 | DMX512_PERSONALITY               | E1.20      | ✓   | ✓   | ✓              | ✓         | ✓               |
| 00 E1                 | DMX512_PERSONALITY_DESCRIPTION   | E1.20      | ✓   |     |                |           | ✓               |
| 00 F0                 | DMX512_STARTING_ADDRESS          | E1.20      | ✓   | ✓   | ✓              | ✓         | ✓               |
| 01 20                 | SLOT_INFO                        | E1.20      | ✓   |     |                |           | ✓               |
| 01 21                 | SLOT_DESCRIPTION                 | E1.20      | ✓   |     |                |           | ✓               |
| Sensors               |                                  |            |     |     |                |           |                 |
| 02 00                 | SENSOR_DEFINITION                | E1.20      | ✓   |     |                |           | ✓               |
| 02 01                 | SENSOR_VALUE                     | E1.20      | ✓   |     |                |           | ✓               |
| Dimmer Settings       |                                  |            |     |     |                |           |                 |
| 03 40                 | DIMMER_INFO                      | E1.37-1    | ✓   |     |                |           | ✓               |
| 03 42                 | MAXIMUM_LEVEL                    | E1.37-1    | ✓   | ✓   | ✓              | ✓         | ✓               |
| 03 43                 | CURVE                            | E1.37-1    | ✓   | ✓   | ✓              | ✓         | ✓               |
| 03 44                 | CURVE_DESCRIPTION                | E1.37-1    | ✓   |     |                |           | ✓               |
| 03 45                 | OUTPUT_RESPONSE_TIME             | E1.37-1    | ✓   | ✓   | ✓              | ✓         | ✓               |
| 03 46                 | OUTPUT_RESPONSE_TIME_DESCRIPTION | E1.37-1    | ✓   |     |                |           | ✓               |
| 03 47                 | MODULATION_FREQUENCY             | E1.37-1    | ✓   | ✓   | ✓              | ✓         | ✓               |
| 03 48                 | MODULATION_FREQUENCY_DESCRIPTION | E1.37-1    | ✓   |     |                |           | ✓               |
| Power / Lamp Settings |                                  |            |     |     |                |           |                 |
| 04 00                 | DEVICE_HOURS                     | E1.20      | ✓   |     |                |           | ✓               |
| 04 01                 | LAMP_HOURS                       | E1.20      | ✓   | ✓   |                |           | ✓               |
| Display Settings      |                                  |            |     |     |                |           |                 |
| 05 01                 | DISPLAY_LEVEL                    | E1.20      | ✓   | ✓   | ✓              | ✓         | ✓               |

| PID               | Description                       | Standard | Get | Set | Queued_Message | Ack_Timer | SULLY<br>4.00 |
|-------------------|-----------------------------------|----------|-----|-----|----------------|-----------|---------------|
| Control           |                                   |          |     |     |                |           |               |
| 10 00             | IDENTIFY_DEVICE                   | E1.20    | ✓   | ✓   | ✓              |           | ✓             |
| 10 01             | RESET_DEVICE                      | E1.20    |     | ✓   |                | ✓         | ✓             |
| 10 20             | PERFORM_SELFTEST                  | E1.20    | ✓   | ✓   | ✓              | ✓         | ✓             |
| 10 21             | SELF_TEST_DESCRIPTION             | E1.20    |     |     |                |           | ✓             |
| RDMnet Management |                                   |          |     |     |                |           |               |
| 07 00             | LIST_INTERFACES                   | E1.37-2  | ✓   |     |                |           | ✓             |
| 07 01             | INTERFACE_LABEL                   | E1.37-2  | ✓   |     |                |           | ✓             |
| 07 02             | INTERFACE_HARDWARE_ADRESS_TYPE1   | E1.37-2  | ✓   |     |                |           | ✓             |
| 07 03             | IPV4_DHCP_MODE                    | E1.37-2  | ✓   | ✓   |                | ✓         | ✓             |
| 07 05             | IPV4_CURRENT_ADDRESS              | E1.37-2  | ✓   |     |                | ✓         | ✓             |
| 07 06             | IPV4_STATIC_ADDRESS               | E1.37-2  | ✓   | ✓   |                |           | ✓             |
| 07 09             | INTERFACE_APPLY_CONFIGURATION     | E1.37-2  |     | ✓   |                |           | ✓             |
| 07 0A             | IPV4_DEFAULT_ROUTE                | E1.37-2  | ✓   | ✓   |                | ✓         | ✓             |
| 07 0B             | DNS_IPV4_NAME_SERVER              | E1.37-2  | ✓   | ✓   |                | ✓         | ✓             |
| PID Manufacturer  |                                   |          |     |     |                |           |               |
| 85 58             | SELFTEST_RESULT                   | E1.20    | ✓   |     |                |           | ✓             |
| 85 59             | CURRENT_IP_ADDRESS                | E1.20    | ✓   |     |                | ✓         | ✓             |
| 85 5A             | CURRENT_NETMASK                   | E1.20    | ✓   |     |                | ✓         | ✓             |
| 85 5B             | CURRENT_DRIVER_STATUS             | E1.20    | ✓   |     |                | ✓         | ✓             |
| 85 5C             | CUSTOM_RESPONSE_TIME_DESCRIPTION  | E1.20    | ✓   |     |                |           | ✓             |
| 85 5D             | CUSTOM_RESPONSE_TIME_VALUE        | E1.20    | ✓   | ✓   | ✓              | ✓         | ✓             |
| 85 60             | DATA_MODE_DESCRIPTION             | E1.20    | ✓   |     |                |           | ✓             |
| 85 61             | DATA_MODE_VALUE                   | E1.20    | ✓   | ✓   | ✓              | ✓         | ✓             |
| 85 62             | STANDALONE_VALUE_DESCRIPTION      | E1.20    | ✓   |     |                |           | ✓             |
| 85 63             | STANDALONE_VALUE                  | E1.20    | ✓   | ✓   | ✓              | ✓         | ✓             |
| 85 64             | SACN_UNIVERSE_VALUE_DESCRIPTION   | E1.20    | ✓   |     |                |           | ✓             |
| 85 65             | SACN_UNIVERSE_VALUE               | E1.20    | ✓   | ✓   | ✓              | ✓         | ✓             |
| 85 66             | ARTNET_UNIVERSE_VALUE_DESCRIPTION | E1.20    | ✓   |     |                |           | ✓             |
| 85 67             | ARTNET_UNIVERSE_VALUE             | E1.20    | ✓   | ✓   | ✓              | ✓         | ✓             |
| 85 68             | SERIAL_DESCRIPTION                | E1.20    | ✓   |     |                |           | ✓             |
| 85 69             | SERIAL                            | E1.20    | ✓   | ✓   | ✓              |           | ✓             |
| 85 6A             | DMX_HOLD_DESCRIPTION              | E1.20    | ✓   |     |                |           | ✓             |
| 85 6B             | DMX_HOLD                          | E1.20    | ✓   | ✓   | ✓              | ✓         | ✓             |
| 85 6C             | COMMAND_LOCK_DESCRIPTION          | E1.20    | ✓   |     |                |           | ✓             |
| 85 6D             | COMMAND_LOCK_VALUE                | E1.20    | ✓   | ✓   | ✓              | ✓         | ✓             |
| 85 6E             | DRIVER_CALIBRATE_DESCRIPTION      | E1.20    | ✓   |     |                |           | ✓             |
| 85 6F             | DRIVER_CALIBRATE_VALUE            | E1.20    | ✓   | ✓   | ✓              | ✓         | ✓             |
| 85 70             | NODE_DESCRIPTION                  | E1.20    | ✓   |     |                |           | ✓             |
| 85 71             | NODE_VALUE                        | E1.20    | ✓   | ✓   | ✓              | ✓         | ✓             |
| 85 72             | TERMINATOR_DESCRIPTION            | E1.20    | ✓   |     |                |           | ✓             |
| 85 73             | TERMINATOR                        | E1.20    | ✓   | ✓   | ✓              | ✓         | ✓             |
| 85 74             | DMX_ERROR_COUNTER_DESCRIPTION     | E1.20    | ✓   |     |                |           | ✓             |
| 85 75             | DMX_ERROR_COUNTER                 | E1.20    | ✓   | ✓   | ✓              | ✓         | ✓             |

“Home values” represent a selection of values manually entered into the device via the keypad to produce a defined state.

These Home values can be set in the following modes:

| Parameters / control modes: | DMX - Dimmer mode (mode 1) | DMX - Profile mode (mode 2) | Followspot 16B | Followspot 16B Iris | Standalone* |
|-----------------------------|----------------------------|-----------------------------|----------------|---------------------|-------------|
| <b>Dimmer</b>               | DMX                        | DMX                         | DMX            | DMX                 | HOME VALUE  |
| <b>Strobe duration</b>      | NA                         | DMX                         | DMX            | DMX                 | NA          |
| <b>Strobe speed</b>         | NA                         | DMX                         | DMX            | DMX                 | NA          |
| <b>Responsive time</b>      | HOME VALUE                 | DMX                         | DMX            | DMX                 | HOME VALUE  |
| <b>Iris</b>                 | HOME VALUE                 | HOME VALUE                  | HOME VALUE     | DMX                 | HOME VALUE  |
| <b>Iris Mode</b>            | HOME VALUE                 | HOME VALUE                  | HOME VALUE     | DMX                 | HOME VALUE  |
| <b>Dimmer Master</b>        | HOME VALUE                 | HOME VALUE                  | DMX            | DMX                 | HOME VALUE  |

If the function is not controlled by DMX, the Home value is automatically activated.



**HTP mode between DMX, local and HOME VALUES**

(\*) Defines a standalone operating mode in the following cases:

- As default values when used without data      Data mode → Protocol → Standalone
- As reference values following a data signal loss.      Set up → Data set up → DMX hold → Standalone

## 5.4 Network

Our network stack can handle several flows of protocol at the same time.

Protocol always available:

- Web page to set up parameters - *See section 5.4.4*
- LLRP (Low Level Recovery Protocol) for IP network configuration - *See section 5.4.5*

A selection of Protocols dedicated to lighting:

- Art-Net V4 - *See section 5.4.1*
- sACN - *See section 5.4.2*
- Dual: Sacn + Art-RDM (DMX512 data signal + RDM) - *See section 5.4.3*

From July 2024 the Robert Juliat equipment based on RJ LED2 platform is configured as follows:

- DHCP (**D**ynamic **H**ost **C**onfiguration **P**rotocol - **RFC1531**) ON  
→ <https://www.rfc-editor.org/rfc/rfc1531>
- Zeroconf (**Z**ero-**c**onfiguration **n**etworking – **IPv4LL/APIPA – RFC3927**) ON  
→ <https://www.rfc-editor.org/rfc/rfc3927>

### IP Addressing of Parameters

*Default:*

- At startup, the device's IP address is set to 000.000.000.000 with a subnet mask of 000.000.000.000
- After connecting to the network, the device awaits the assignment of an IP address and subnet mask by the DHCP server.
- If there is no DHCP server, a unique IP address and subnet mask are automatically assigned.  
IP : 169.254.XXX.XXX Mask : 255.255.0.0

Most personal computers are configured with DHCP and Zeroconf enabled, so the IP address defaults to 169.254.X.X with a subnet mask of 255.255.0.0.

When connected to a Robert Juliat device, since the IP address/mask range are in the same class, network communication works seamlessly.

This configuration was chosen to make it easier for non-IT technicians.

#### Static IP;

It's possible to configure a static IP address, but be sure to select a unique IP address with the correct subnet mask.

Configuration can be done via the Web Page, RDM, LLRP, Art-Net, or locally.

#### Default IP Address:

When DHCP mode is OFF and no static IP address has been selected, the device will default to a Class A IP address of 2.XXX.XXX.XXX with a subnet mask of 255.0.0.0.

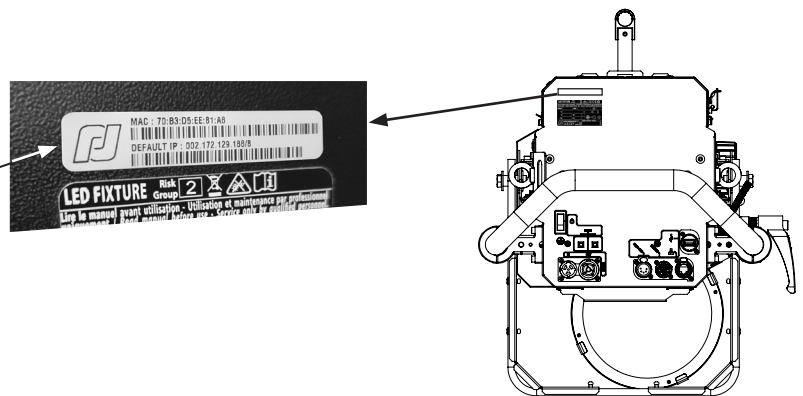
This address can be found on a label near the ID plate or by pressing the right arrow on the local control.

#### Default Settings:

DHCP = OFF

Address = 2.XXX.XXX.XXX

Mask = 255.0.0.0



#### Changing the Controlling Computer's IP Address:

- The IP address and subnet mask of both the fixture and the computer must be on the same network class.
- The computer's IP address must be different.
- Refer to your operating system's support to modify IPv4 settings:

Change your IP address on Windows

➔ <https://support.microsoft.com/en-us/windows/change-tcp-ip-settings-bd0a07af-15f5-cd6a-363f-ca2b6f391ace>

Change your IP address on Mac

➔ <https://support.apple.com/en-ae/guide/mac-help/mh14129/mac>

#### Example: Using the fixture's default IP address

1 - Computer IP address: 2.2.2.2

2 - Computer subnet mask: 255.0.0.0

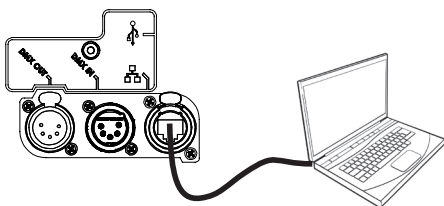
## 5.4.1.1 Protocol

**Artistic Licence Art-Net v4.**

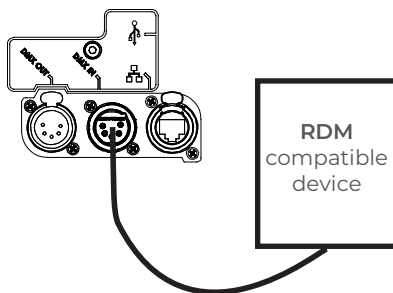
For more information about Art-Net protocol: <http://art-net.org.uk/>

## 5.4.1.2 Configuration

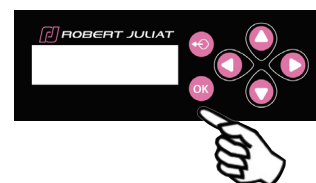
Set mode through Web interface  
(see 5.9 Web interface)



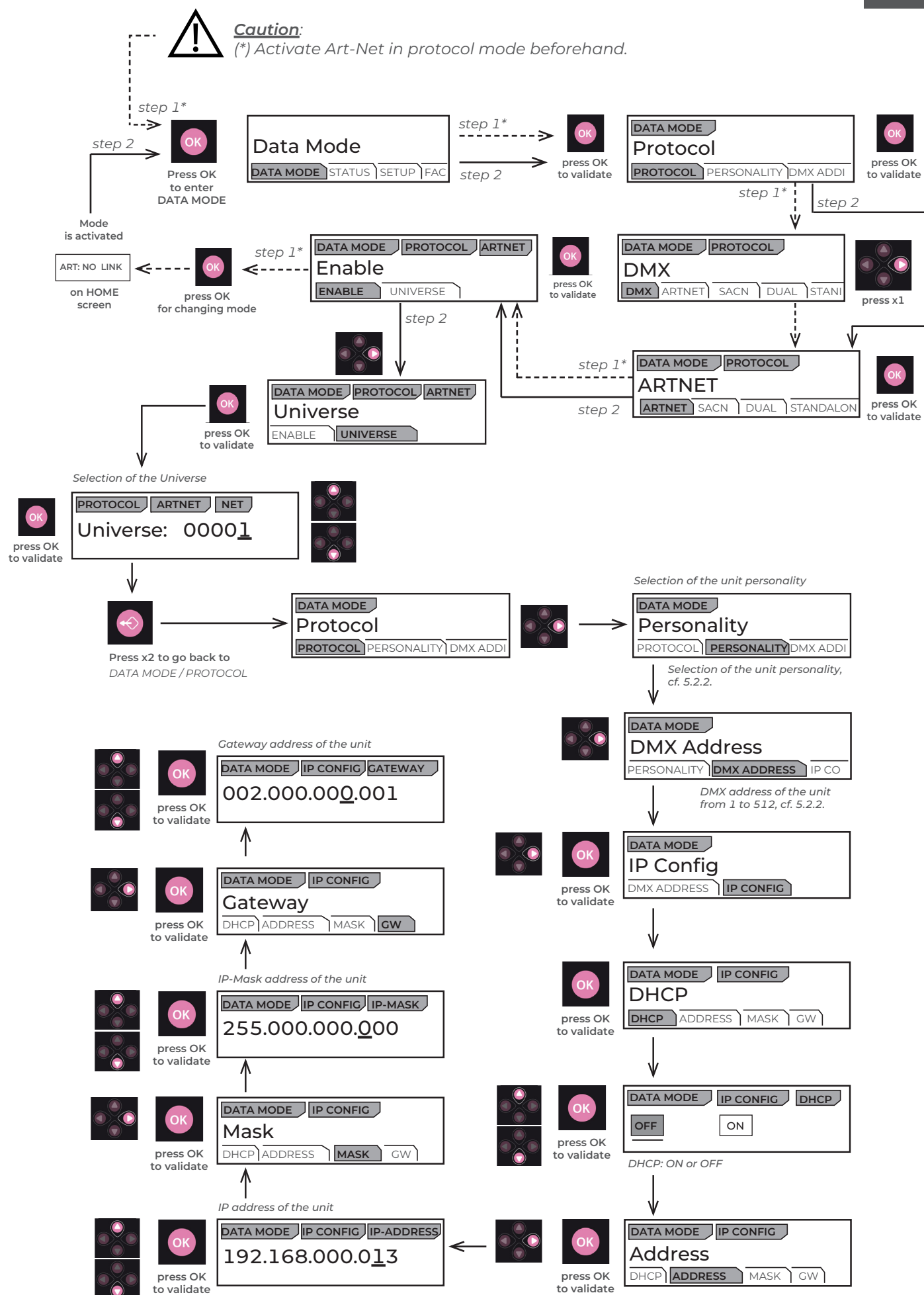
Set mode through RDM  
protocol



Local control



- 1 - If necessary, change IP settings
- 2 - Set Art-Net Universe
- 3 - Set DMX address
- 2 - Set personality mode (see 5.2.4. DMX chart)

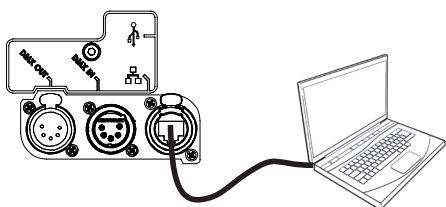


## 5.4.2.1 Protocol

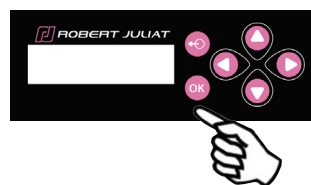
## ANSI E1.31 – 2009 sACN (Streaming-ACN)

## 5.4.2.2 Configuration

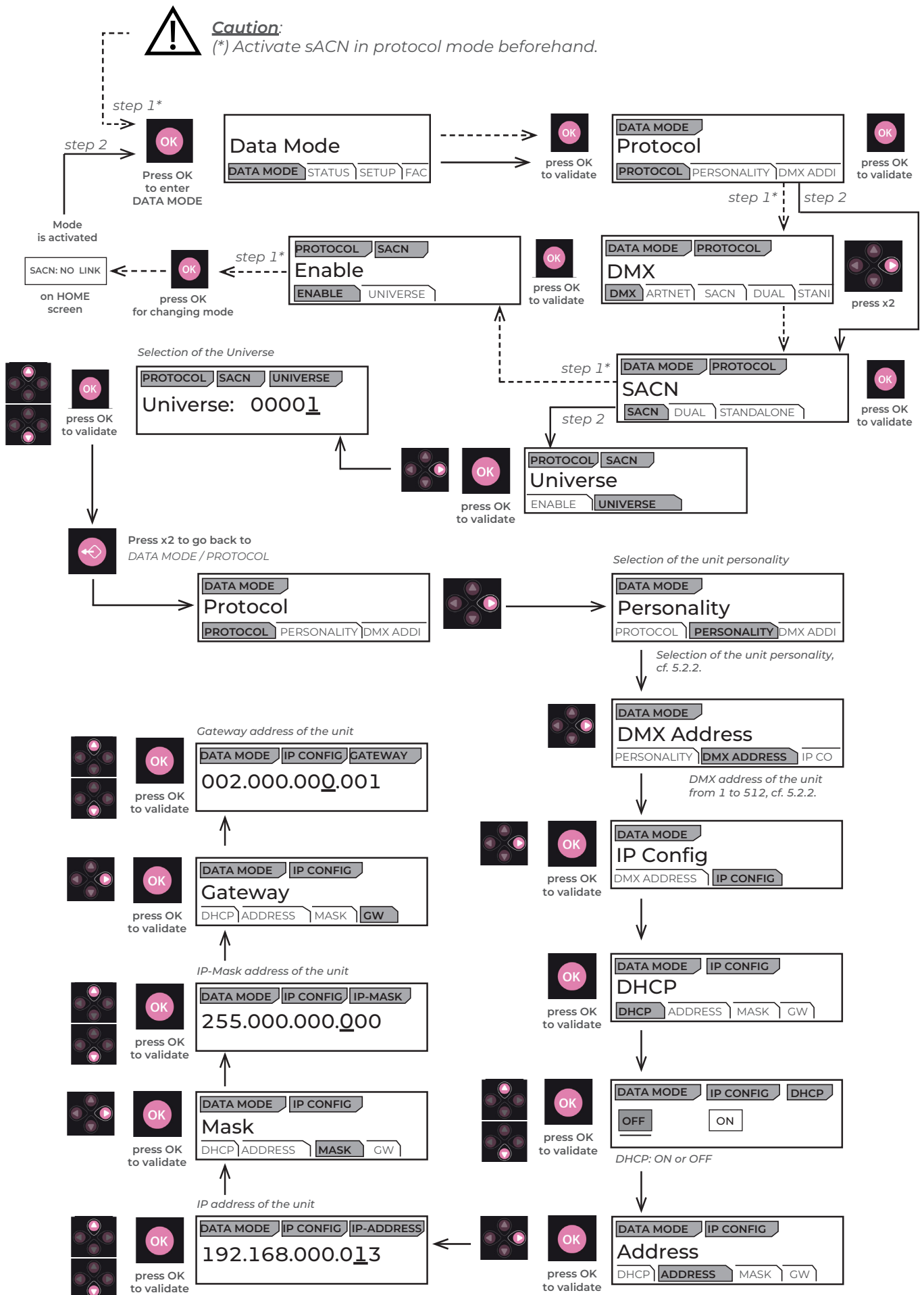
Set mode through Web interface  
(see 5.9 Web interface)



Set through local control



- 1 - If necessary, change IP settings
- 2 - Set sACN universe
- 3 - Set DMX address
- 2 - Set personality mode (see 5.2.4. DMX chart)



## 5.4.3.1 Protocol

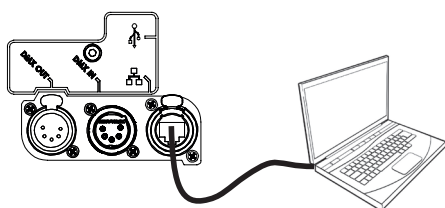
**Dual Mode: Available only on an Ethernet network**

It allows to send a DMX 512 signal through a sACN data stream and at the same time to use an Artnet/ArtRdm data stream to control, set and monitor the equipment via RDM.

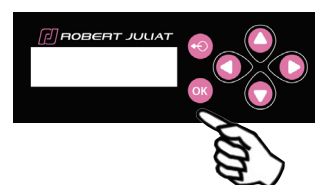
This mode can be set by Web interface or the local control screen.

## 5.4.3.2 Configuration

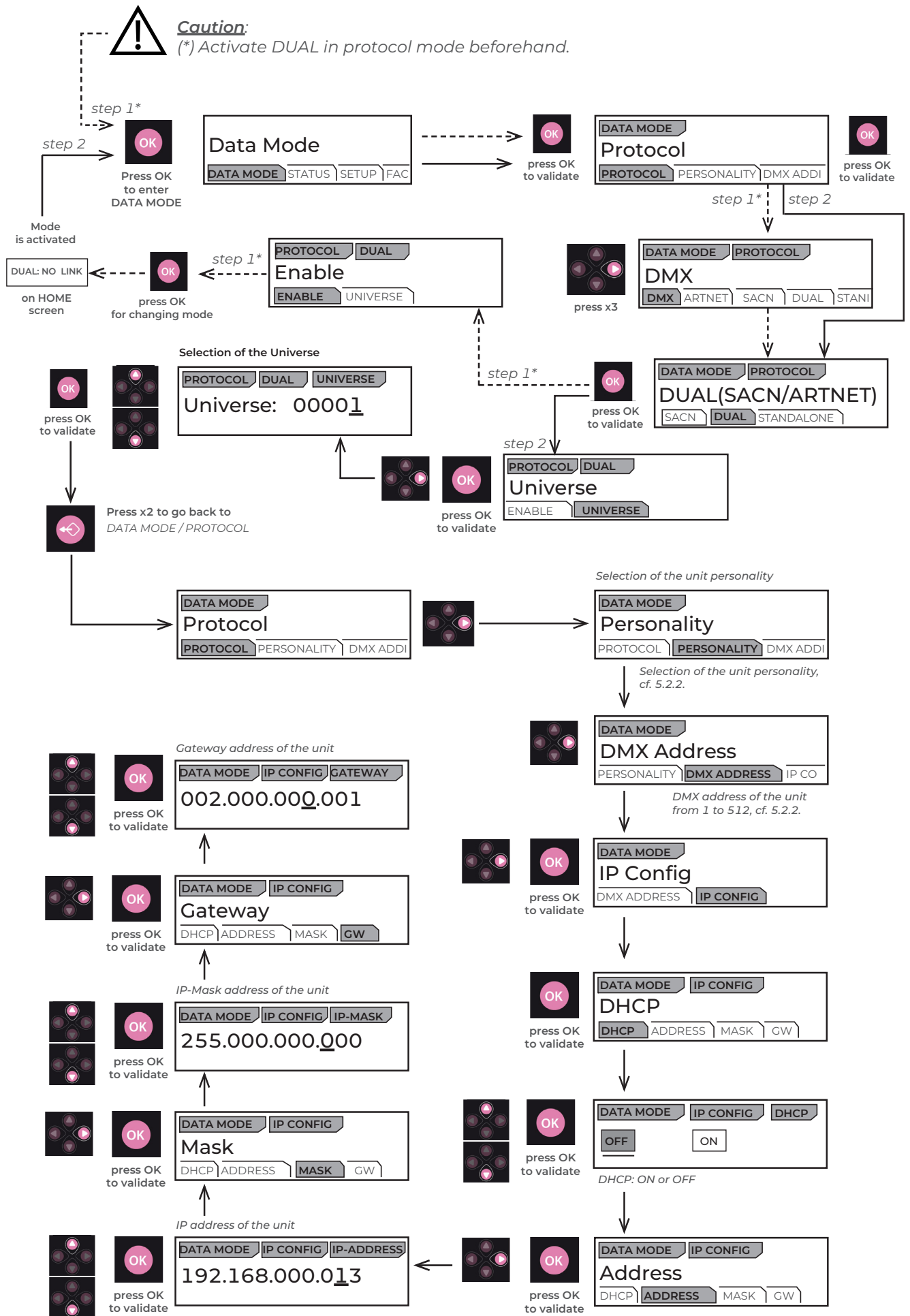
Set mode through Web interface  
(see 5.9 Web interface)



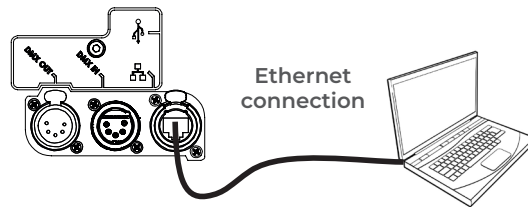
Set through local control



- 1 - If necessary, change IP settings
- 2 - Set DUAL universe
- 3 - Set DMX address
- 4 - Set personality mode (see 5.2.4. DMX chart)



## 5.4.4.1 Control



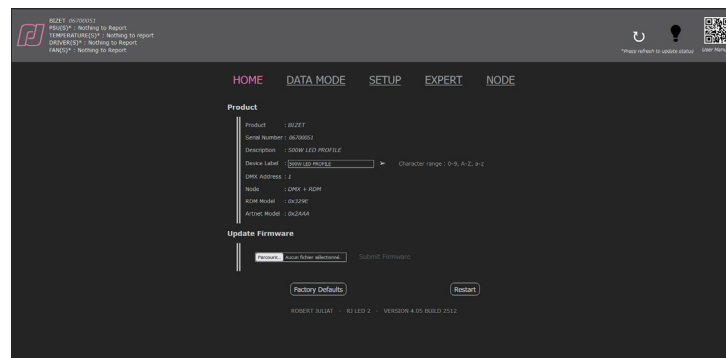
The fixture must be connected to a compatible network or directly linked to a computer with an RJ45 Ethernet cable.

The fixture's IP address: *see section 5.4. Network*

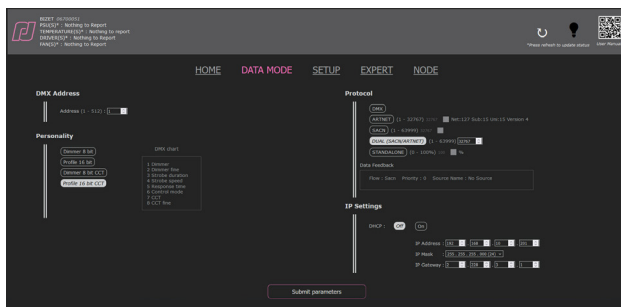
## 5.4.4.2 Connection to the Web interface



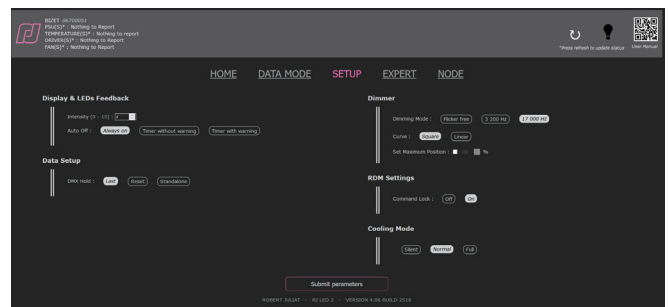
- 1 - Open a web browser (Microsoft Edge, Firefox, Apple Safari...)
- 2 - Enter the fixture's IP address in the browser's address bar
  - "00X" is read as "X".
  - Never type a zero (0) before the numbers XX or X (*see 5.4.4*)
- 3 - The HOME page will appear, and all settings can now be viewed and modified.



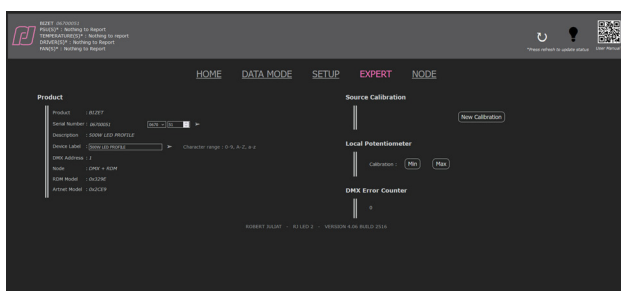
HOME Page



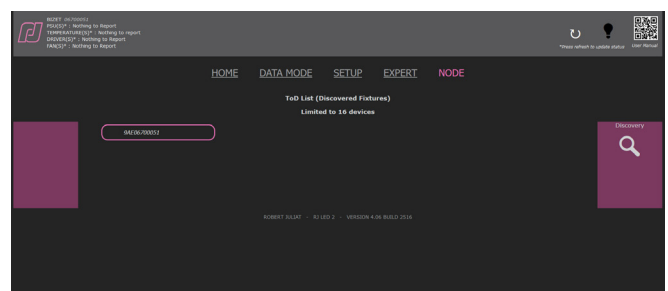
DATA MODE Page



SETUP Page



EXPERT Page, password-protected (1280).



NODE Page

UID\* list of devices detected by RDM on the DMX OUT link;  
the first UID is the fixture.

(\*) UID : RDM Unique Identifier

#### 5.4.5 LLRP (Low-Level Reader Protocol)

LLRP is a multicast protocol that facilitates basic IP configuration. It is part of the ESTA E1.33 RDMnet standard.

LLRP can be used for the initial configuration of networked equipment. It provides a low-level mechanism for discovering and configuring the network parameters of devices, including IP settings and basic RDMnet configuration settings.

LLRP Targets expose these parameters for configuration and respond to discovery requests from LLRP Managers. Once an LLRP Manager discovers one or more LLRP Targets, it can use LLRP to send RDM commands to retrieve or modify these parameters.

## A SOLUTION FOR INCORRECT OR UNKNOWN IP CONFIGURATION

Network connectivity issues are often caused by misconfigured network addresses, with improperly configured subnet masks being the most common problem.

LLRP uses two multicast IP addresses, enabling communication even when all other network communication has failed.

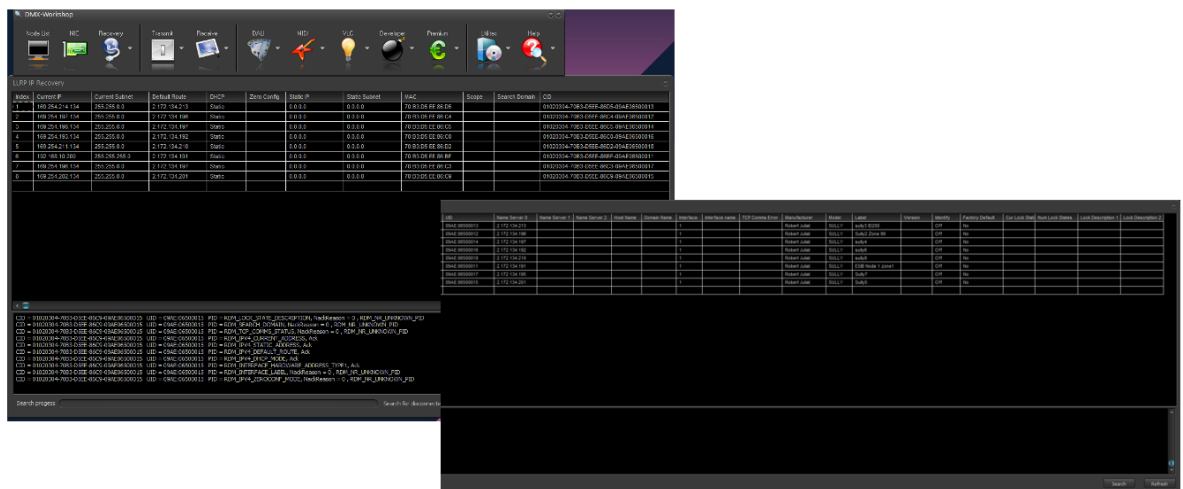
Since multicast addresses are unaffected by a misconfigured subnet mask, LLRP provides an efficient and reliable solution to recover from network misconfiguration.

In summary, LLRP simplifies the process of identifying and configuring the IP addressing of LLRP-compatible devices on your network.

All Robert Juliat equipment based on the RJ LED2 platform includes LLRP functionality.

Two LLRP Manager software tools are available for free:

- DMXworkshop by Wayne Howell from Singularity (UK): <https://singularity-uk.com/product/dmx-workshop/>



- CLU/Netron from Obsidian : <https://obsidiancontrol.com/netron-clu>

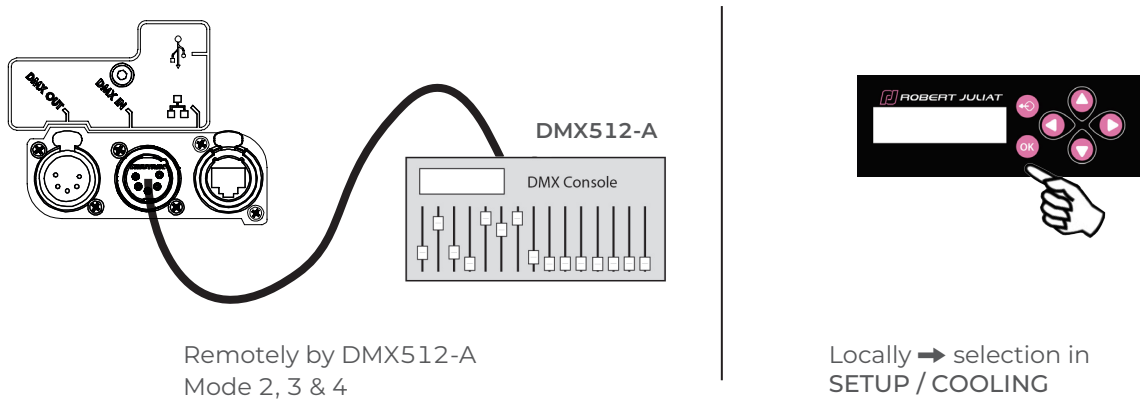
|  | Device Type | Device Name  | IP Address      | Subnet        | Firmware | Web | Manufacturer  | Identify |
|--|-------------|--------------|-----------------|---------------|----------|-----|---------------|----------|
|  | SULLY       | sully3 ID200 | 169.254.214.134 | 255.255.0.0   | --       | --  | Robert Juliat |          |
|  | SULLY       | sully8       | 169.254.211.134 | 255.255.0.0   | --       | --  | Robert Juliat |          |
|  | SULLY       | Sully2 Zone  | 169.254.197.134 | 255.255.0.0   | --       | --  | Robert Juliat |          |
|  | SULLY       | ESIB Node 1  | 192.168.10.200  | 255.255.255.0 | --       | --  | Robert Juliat |          |
|  | SULLY       | sully6       | 169.254.193.134 | 255.255.0.0   | --       | --  | Robert Juliat |          |
|  | SULLY       | sully4       | 169.254.198.134 | 255.255.0.0   | --       | --  | Robert Juliat |          |
|  | SULLY       | Sully5       | 169.254.202.134 | 255.255.0.0   | --       | --  | Robert Juliat |          |
|  | SULLY       | Sully7       | 169.254.196.134 | 255.255.0.0   | --       | --  | Robert Juliat |          |

5.5 Fan cooling modes

5.5.1 Range

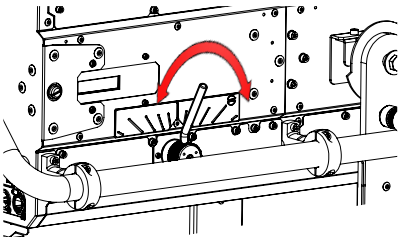
| Mode   | Fan Speed  |
|--------|----------------------------------------------------------------------------------------------|
| SILENT | Minimum – constant speed                                                                     |
| NORMAL | Regulated – depending on ambient temperature                                                 |
| FULL   | Maximum – constant speed                                                                     |

5.5.2 Control



→ selection in SETUP / CONTROL

Selection

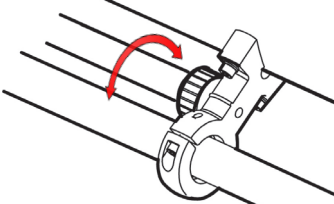


BACK

SETUP
CONTROL

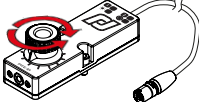
Back

FRONT
BACK
ACC1
ACC2

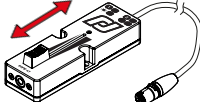


FRONT

Optional accessories

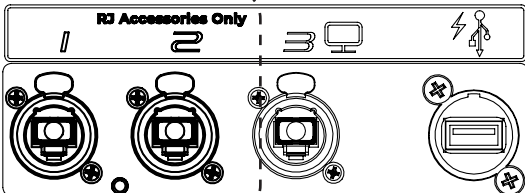


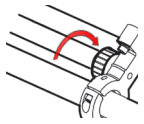
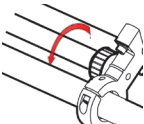
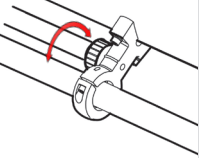
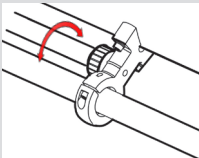
P1FE-R1



P1FE-L1

ACC1 & ACC2



| Function                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Parameters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Rotation</b></p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <div style="display: flex; justify-content: space-around; border-bottom: 1px solid black;"> <span>SETUP</span> <span>CONTROL</span> </div> <div style="display: flex; justify-content: space-around;"> <span>Rotation</span> </div> <div style="display: flex; justify-content: space-around; border-top: 1px solid black;"> <span>SETUP</span> <span>ROTATION</span> <span>CALIBRATION</span> </div> </div> | <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <div style="display: flex; justify-content: space-around; border-bottom: 1px solid black;"> <span>SETUP</span> <span>CONTROL</span> <span>ROTATION</span> </div> <div style="display: flex; justify-content: space-around;"> <span>Normal(CW)</span> <span>Invert (CCW)</span> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p>Normal (CW):<br/>Clockwise</p> <div style="display: flex; align-items: center; margin-top: 10px;">  <div style="margin-left: 10px;"> <div style="background-color: black; color: white; padding: 5px; border-radius: 50%; text-align: center;">OK</div> <p>Press OK to validate</p> </div> </div> <p>Invert (CCW):<br/>Anticlockwise</p>                                                                                                                                                                                   |
| <p><b>Calibration</b></p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <div style="display: flex; justify-content: space-around; border-bottom: 1px solid black;"> <span>SETUP</span> <span>CONTROL</span> </div> <div style="display: flex; justify-content: space-around;"> <span>Calibration</span> </div> <div style="display: flex; justify-content: space-around; border-top: 1px solid black;"> <span>ROTATION</span> <span>CALIBRATION</span> </div> </div>              | <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <div style="display: flex; justify-content: space-around; border-bottom: 1px solid black;"> <span>SETUP</span> <span>CONTROL</span> <span>CALIB</span> </div> <div style="display: flex; justify-content: space-around;"> <span>Min</span> <span>Max</span> </div> </div> <div style="text-align: center; margin-top: 20px;">  </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <div style="display: flex; justify-content: space-around; border-bottom: 1px solid black;"> <span>SETUP</span> <span>CONTROL</span> <span>CALIB</span> </div> <div style="display: flex; justify-content: space-around;"> <span>Min</span> <span>Max</span> </div> </div> | <p>Adjust to the minimum position</p> <div style="display: flex; align-items: center; margin-top: 10px;">  <div style="margin-left: 10px;"> <div style="background-color: black; color: white; padding: 5px; border-radius: 50%; text-align: center;">OK</div> <p>Press OK to validate</p> </div> </div> <p>Adjust to the maximum position</p> <div style="display: flex; align-items: center; margin-top: 10px;">  <div style="margin-left: 10px;"> <div style="background-color: black; color: white; padding: 5px; border-radius: 50%; text-align: center;">OK</div> <p>Press OK to validate</p> </div> </div> |

## 6.1 Preventive maintenance

### 6.1.1 Frequency

General maintenance should be performed at least once a year or more frequently if the equipment is operated in adverse conditions (smoke, heat, humidity, touring, etc.).

### 6.1.2 General cleaning

Remove dust from the unit.

### 6.1.3 General visual check



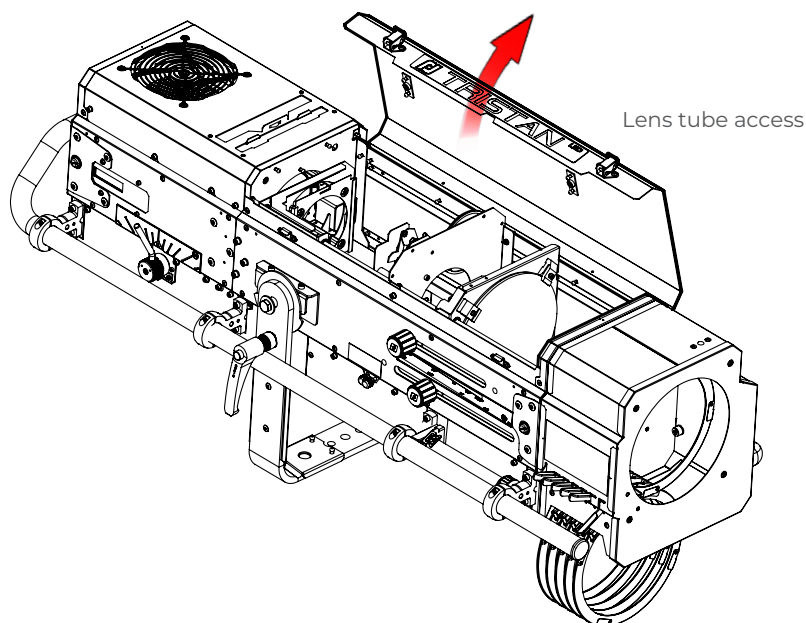
- No trace of heat.
- No loose contacts.
- No missing parts.
- Tighten mechanical assemblies (screws, bolts and nuts, etc.).

### 6.1.4 LED source

- Do not touch the surface of the LED source (no contact with your hands or any tools).
- Do not put compressed air directly on the source.
- Contact a certified RJ distributor in case of residuals or other objects located on the surface of the LED source.

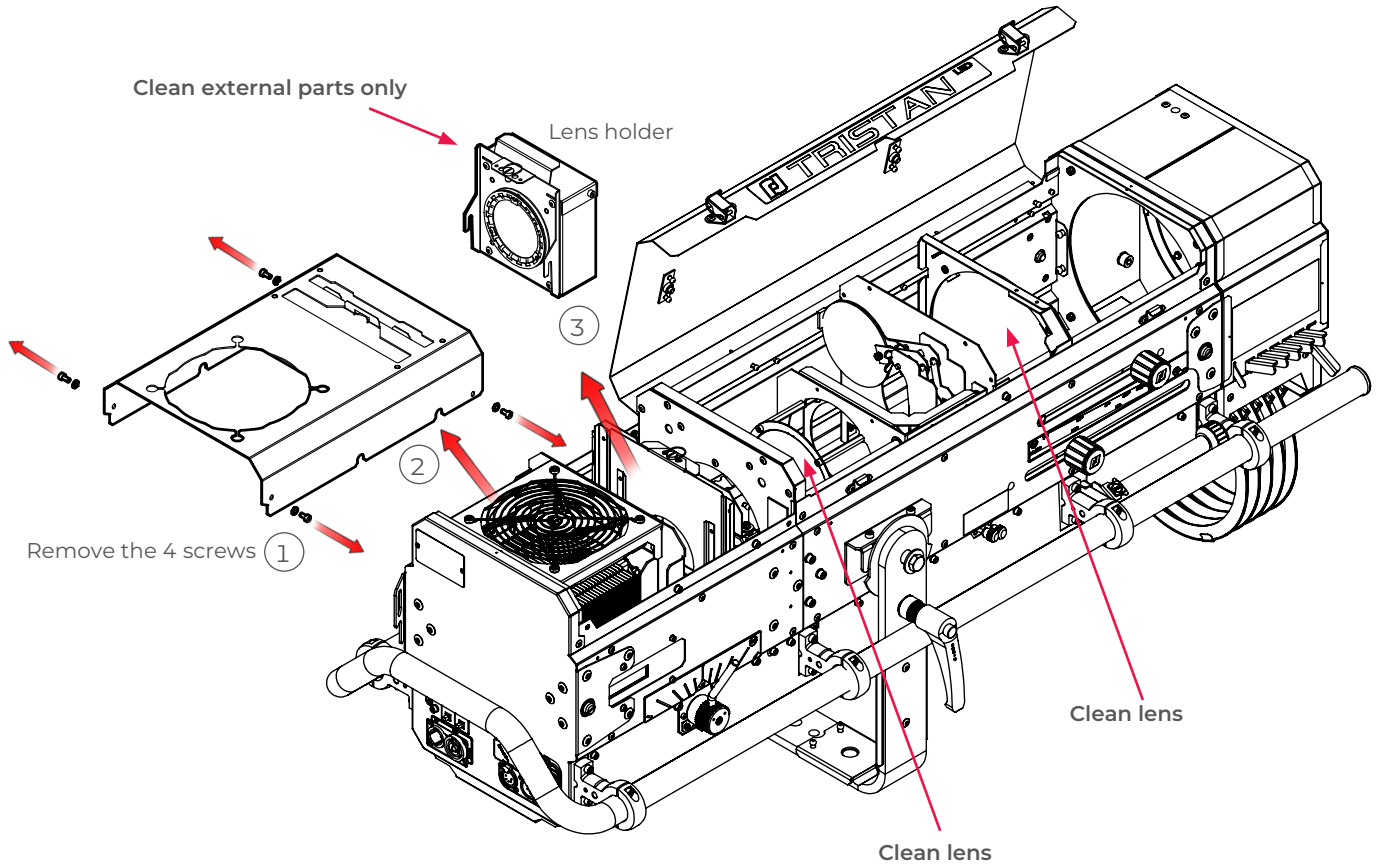
### 6.1.5 Optics

Only use solutions containing alcohol to clean optical parts (lenses).



- To clean the optical parts, use a soft cloth in combination with distilled water or isopropyl alcohol recommended for coated optics. Do not use any cleaning product that contains solvents or abrasives, as these can cause surface damage.
- Dry with a soft lint-free cloth.

Removing the LED housing cover: 1 → 2



In case of problem, contact RJ distributor with the following information:

- Model, version and serial number of the product.
- From the menu status:
  - Software version
  - LED board IDs
  - Device hours
  - Picture of the Selftest Report (Cf. section 6.6 Selftest)
- Description of the problem.



## 6.3 Electronic thermal management system

In case of overheating, light intensity will be reduced by the system.

“Power reduction X%” will be shown on the display with the reducing percentage.

## 6.4 Firmware update

1. Firmware available on [www.robertjuliat.com/followspots/Tristan](http://www.robertjuliat.com/followspots/Tristan)
2. Download and unzip the file

There are 4 files:

- Firmware (.upd2 format)
- Firmware history
- Update procedure
- User manual from firmware version V4.0x onwards

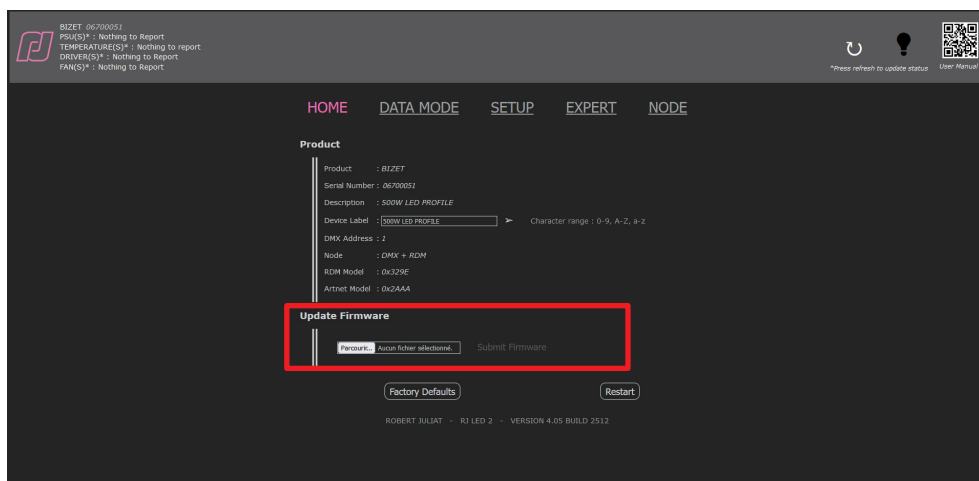
3. Switching on the lighting fixture
4. Connect Network from computer to the fixture
5. Open a Web browser (Microsoft Edge, Firefox, Apple Safari....)
6. Enter the fixture's IP address in the browser's address bar.



- “00X” is read as “X”.
- Never type a zero (0) before the numbers XX or X (**see 5.4.4**)

7. Upload your firmware file (.upd2)

In the “Update firmware” window, select the update file and click on “Submit firmware”.

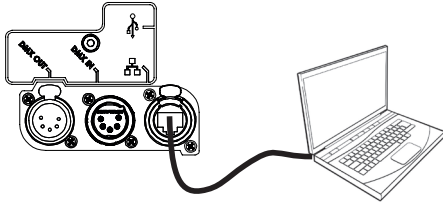


## 6.5 Factory defaults

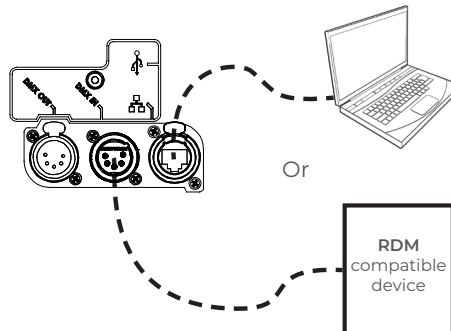
EN

Select **FACTORY DEFAULT** in the main menu to reset all values and parametres

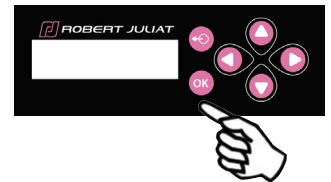
Set to factory defaults /  
reset through web interface  
(Home page)



Set to factory defaults /  
reset through RDM protocol



Set to factory defaults /  
reset through local control



## 6.6 Selftest

Select **SELFTEST** in the STATUS menu :



Press OK  
to start  
SELFTEST



At the end of each test, a **PASS/FAIL** message will be displayed.

If the DMX and network functions need to be tested, the system will prompt you to perform certain operations.

|                   |   |     |   |               |   |      |   |
|-------------------|---|-----|---|---------------|---|------|---|
| test report: Fail |   |     |   | P=Pass F=Fail |   |      |   |
| fans              | P | pow | P | temp          | P | dmxi | P |
| dmxo              | F | net | F | drv           | P |      |   |

### Test Report

An "F" (FAIL) or "P" (PASS) will be displayed at the end of the self-test (SELFTEST).

If the problem persists, please take a photo of the test result and send it either to your Robert Juliat dealer or to the Robert Juliat After-Sales Service, if requested (email: [service@robertjuliat.fr](mailto:service@robertjuliat.fr))